

#2

Access DB#

266436

**SEARCH REQUEST FORM**

Scientific and Technical Information Center

Requester's Full Name: Sim J. Lee Examiner #: 76060 Date: 11/11/06  
 Art Unit: 1752 Phone Number 301 27333 Serial Number: 101803,999  
 Mail Box and Bldg/Room Location: 9C15 Results Format Preferred (circle): PAPER DISK E-MAIL  
 (Rem)

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*  
 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched.  
 Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: P12. All B:B

Inventors (please provide full names): \_\_\_\_\_

SCIENTIFIC REFERENCE BR  
 Sci & Tech Inf. Ctr

NOV 02 2006

Earliest Priority Filing Date: \_\_\_\_\_

Pat. & T. M. Office

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) and with the appropriate serial number.

P12. search for a polymer  
 containing the moiety of formula  
 (2-b) shown in cl. #5



(Checked them ALL)

**STAFF USE ONLY**

|  | Type of Search         | Vendors and cost where applicable |
|--|------------------------|-----------------------------------|
| Searcher: <u>RUS</u>                   | NA Sequence (#) _____  | STN <u>✓</u>                      |
| Searcher Phone #: _____                | AA Sequence (#) _____  | Dialog _____                      |
| Searcher Location: _____               | Structure (#) <u>2</u> | Questel/Orbit _____               |
| Date Searcher Picked Up: _____         | Bibliographic _____    | Dr. Link _____                    |
| Date Completed: <u>11/07/06</u>        | Litigation _____       | Lexis/Nexis _____                 |
| Searcher Prep & Review Time: <u>30</u> | Fulltext _____         | Sequence Systems _____            |
| Clerical Prep Time: _____              | Patent Family _____    | WWW/Internet _____                |
| Online Time: <u>137</u>                | Other _____            | Other (specify) _____             |



# STIC Search Results Feedback Form

**EIC17000**

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader  
571/272-2505 REMSEN 4B28

## Voluntary Results Feedback Form

- I am an examiner in Workgroup:  Example: 1713  
➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

- Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC1700 REMSEN 4B28

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sspatrxs01

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'HCAPLUS' AT 12:07:53 ON 07 NOV 2006  
FILE 'HCAPLUS' ENTERED AT 12:07:53 ON 07 NOV 2006  
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

=> d his full

(FILE 'HOME' ENTERED AT 09:54:02 ON 07 NOV 2006)

FILE 'HCAPLUS' ENTERED AT 09:54:18 ON 07 NOV 2006

E US20040185375/PN

L1 1 SEA ABB=ON PLU=ON US2004185375/PN  
SEL RN

FILE 'REGISTRY' ENTERED AT 09:58:42 ON 07 NOV 2006

L2 6 SEA ABB=ON PLU=ON (761445-14-1/BI OR 761445-15-2/BI OR  
761445-16-3/BI OR 761445-17-4/BI OR 761445-18-5/BI OR  
761445-20-9/BI)

FILE 'HCAPLUS' ENTERED AT 09:58:59 ON 07 NOV 2006

L3 1 SEA ABB=ON PLU=ON L1 AND L2

FILE 'REGISTRY' ENTERED AT 09:59:15 ON 07 NOV 2006

L7 SCR 2043

L9 STRUCTURE

L10 STRUCTURE

L12 50 SEA SSS SAM L9 AND L7

L13 11036 SEA SSS FUL L9 AND L7

SAV L13 LEE999/A

L14 42 SEA SUB=L13 SSS SAM L10

L15 720 SEA SUB=L13 SSS FUL L10

L16 STRUCTURE

L17 9 SEA SUB=L13 SSS SAM L16

L18 150 SEA SUB=L13 SSS FUL L16

SAV L18 LEE999B/A

FILE 'HCAPLUS' ENTERED AT 11:34:34 ON 07 NOV 2006

L19 491 SEA ABB=ON PLU=ON L15

L20 155 SEA ABB=ON PLU=ON L18

L21 34 SEA ABB=ON PLU=ON L19 (L) (PLANOG? OR LITHO?)

L22 5 SEA ABB=ON PLU=ON L19 (L) (PLANOG? OR LITHO?) (L)  
?CURSOR?

L23 6 SEA ABB=ON PLU=ON L19 (L) (PLANOG? OR LITHO?) AND  
?CURSOR?

L24 34 SEA ABB=ON PLU=ON L21 OR L22 OR L23

L25 33 SEA ABB=ON PLU=ON L24 AND PHOTOCHEM?/SC,SX

L26 15 SEA ABB=ON PLU=ON L20 (L) (PLANOG? OR LITHO?)

L27 0 SEA ABB=ON PLU=ON L20 (L) (PLANOG? OR LITHO?) (L)  
?CURSOR?

L28 1 SEA ABB=ON PLU=ON L20 (L) (PLANOG? OR LITHO?) AND  
?CURSOR?

L29 15 SEA ABB=ON PLU=ON L26 OR L28

L30 15 SEA ABB=ON PLU=ON L29 AND PHOTOCHEM?/SC,SX

L31 9 SEA ABB=ON PLU=ON L25 AND (1840-2003)/PRY,PY,AY

L32 15 SEA ABB=ON PLU=ON L30 AND (1840-2003)/PRY,PY,AY

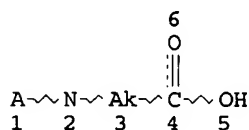
L33 9 SEA ABB=ON PLU=ON L31 NOT L32  
 L34 1 SEA ABB=ON PLU=ON L31 AND 2004:780219/AN

=> file reg

FILE 'REGISTRY' ENTERED AT 12:08:10 ON 07 NOV 2006  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2006 American Chemical Society (ACS)

=> d l32 que stat

L7 SCR 2043  
 L9 STR



NODE ATTRIBUTES:

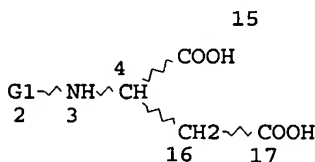
NSPEC IS RC AT 1  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE

L13 11036 SEA FILE=REGISTRY SSS FUL L9 AND L7  
 L16 STR



VAR G1=11/13/14

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L18 150 SEA FILE=REGISTRY SUB=L13 SSS FUL L16  
 L20 155 SEA FILE=HCAPLUS ABB=ON PLU=ON L18  
 L26 15 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 (L) (PLANOG? OR  
 LITHO?)  
 L28 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 (L) (PLANOG? OR  
 LITHO?) AND ?CURSOR?  
 L29 15 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 OR L28  
 L30 15 SEA FILE=HCAPLUS ABB=ON PLU=ON L29 AND PHOTOCHEM?/SC,SX  
 L32 15 SEA FILE=HCAPLUS ABB=ON PLU=ON L30 AND (1840-2003)/PRY,  
 PY,AY

=> file hcaplus

FILE 'HCAPLUS' ENTERED AT 12:08:20 ON 07 NOV 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

=> d 132 1-15 ibib abs hitstr hitind

L32 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:358824 HCAPLUS

DOCUMENT NUMBER: 122:252050

TITLE: Electrophotographic lithographic plate master with superior desensitization and good printing performance

INVENTOR(S): Kato, Eiichi; Ishii, Kazuo

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 65 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|-------------|------|----------|-----------------|----------|
| JP 06282119 | A2   | 19941007 | JP 1991-85196   | 19910417 |
| JP 2894859  | B2   | 19990524 | JP 1991-85196   | 19910417 |

PRIORITY APPLN. INFO.: <--

AB The title master comprises an elec. conductive support and  $\geq 1$  photoconductive layer containing photoconductive zinc oxide, photosensitizing dyes, and binder resins containing polymers (Mw 1 + 103 to 2 + 104) of 0.5-15% components having polar group(s) chosen from PO<sub>3</sub>H<sub>2</sub>, SO<sub>3</sub>H, CO<sub>2</sub>H, P(O)(OH)R<sub>1</sub> (R<sub>1</sub> = hydrocarbyl, OR<sub>2</sub>; R<sub>2</sub> = hydrocarbyl), and acid anhydride groups and  $\geq 30\%$  CHa1:Ca2CO2R3 (a1, a2 = H, halogen, cyano, hydrocarbyl; R3 = hydrocarbyl) and polymer particles (having diameter equal or smaller than the above zinc oxide) obtained by dispersion polymerization of monomer(s) containing functional group(s) decomposable to OH in the presence of a soluble dispersion-stabilizing resin in a nonaq. medium in which the monomers are soluble but the polymers formed from the monomers are not.

IT 135820-62-1P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(binders; electrophotog. lithog. plate master with superior desensitization and good printing performance)

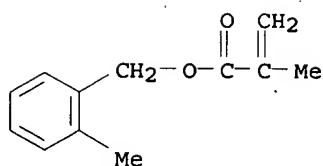
RN 135820-62-1 HCAPLUS

CN L-Aspartic acid, N-(1-oxo-2-propenyl)-, polymer with (2-methylphenyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 91990-22-6

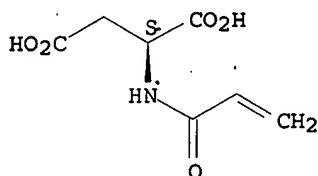
CMF C12 H14 O2



CM 2

CRN 70714-77-1  
CMF C7 H9 N O5

Absolute stereochemistry.



IC ICM G03G0013-28  
ICS G03G0005-05; G03G0005-06; G03G0005-08  
CC 74-3 (Radiation Chemistry, **Photochemistry**, and  
Photographic and Other Reprographic Processes)  
IT 65697-21-4P, Benzyl methacrylate-methacrylic acid copolymer  
65697-22-5P, Acrylic acid-benzyl methacrylate copolymer  
126969-70-8P 126969-78-6P 130094-33-6P 130952-79-3P  
131808-63-4P 135740-18-0P 135740-30-6P, Acrylic acid-phenyl  
methacrylate copolymer 135740-31-7P 135740-32-8P 135740-33-9P  
135740-35-1P 135740-37-3P 135740-41-9P 135740-44-2P  
135740-46-4P 135770-63-7P **135820-62-1P** 139663-63-1P  
142648-25-7P 146817-57-4P 146817-58-5P 146817-60-9P  
146817-61-0P 160981-13-5P 160981-14-6P 160981-15-7P  
160981-16-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered  
material use); PREP (Preparation); USES (Uses)  
(binders; electrophotog. lithog. plate master with  
superior desensitization and good printing performance)

L32 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:328341 HCAPLUS  
DOCUMENT NUMBER: 122:118886  
TITLE: Lithographic masters  
INVENTOR(S): Kato, Eiichi  
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 97 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|-------------|------|----------|-----------------|----------|
| JP 05210267 | A2   | 19930820 | JP 1992-40513   | 19920131 |

PRIORITY APPLN. INFO.:

&lt;-- JP 1992-40513

199201  
31

&lt;--

AB The title masters with good water retention and providing good print image and printing durability under severe conditions, useful in laser scanning exposure utilize electrophotog. photoreceptors containing at least one photoconductive layer containing binder resins on an elec. conductive support and a surface layer containing nonaq. dispersed resin particles. The resin particles are obtained by dispersion polymerization, in a nonaq. solvent, of monofunctional monomers containing  $\geq 1$  functional groups which upon decomposition form thiol, sulfo, amino or -P(:Z0)(Z0H)R1 group (Z0 = O, S; R1 = Z0H, hydrocarbyl, Z0R2; R2 = hydrocarbyl) and forming polymers insol. in the solvent and monofunctional comonomers containing Si and/or F in the presence of dispersion-stabilizing resins soluble in the polymerization medium. The binder resins have Mw 1000-20,000, contain  $\geq 30\%$  CH(a1)C(a2)(CO2R3) repeating unit and 0.5-15% polymer component having polar group(s) chosen from PO3H2, SO3H, CO2H, P(O)(OH)R4, and cyclic acid anhydride group (a1, a2 = H, halogen, cyano, hydrocarbyl; R3 = hydrocarbyl; R4 = hydrocarbyl, hydrocarbyloxy).

IT 135820-62-1P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(manufacture for binders in lithog. master manufacture)

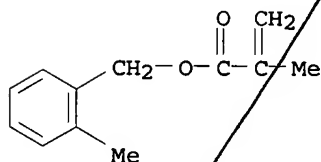
RN 135820-62-1 HCAPLUS

CN L-Aspartic acid, N-(1-oxo-2-propenyl)-, polymer with (2-methylphenyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 91990-22-6

CMF C12 H14 O2

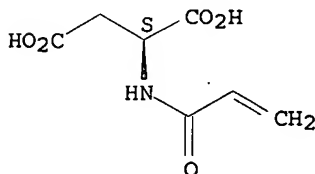


CM 2

CRN 70714-77-1

CMF C7 H9 N O5

Absolute stereochemistry.



IC ICM G03G0013-28

ICS G03G0005-05; G03G0005-06; G03G0005-147

CC 74-3 (Radiation Chemistry, **Photochemistry**, and Photographic and Other Reprographic Processes)

IT 65697-21-4P, Benzyl methacrylate-methacrylic acid copolymer

65697-22-5P, Acrylic acid-benzyl methacrylate copolymer

126969-70-8P 126969-78-6P 130094-33-6P, 2-Carboxyethyl

acrylate-2-chloro-6-methylphenyl methacrylate copolymer  
 130952-79-3P 131808-63-4P 135740-18-0P 135740-30-6P, Acrylic  
 acid-phenyl methacrylate copolymer 135740-31-7P 135740-32-8P  
 135740-33-9P 135740-35-1P 135740-36-2P 135740-37-3P  
 135740-38-4P 135740-39-5P 135740-41-9P 135740-43-1P  
 135740-44-2P 135740-46-4P 135770-63-7P 135820-62-1P  
 139663-63-1P 142648-25-7P 146817-57-4P 146817-58-5P  
 146817-61-0P 147524-36-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered  
 material use); PREP (Preparation); USES (Uses)  
 (manufacture for binders in lithog. master manufacture)

L32 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:324490 HCAPLUS  
 DOCUMENT NUMBER: 122:92783  
 TITLE: Lithographic masters  
 INVENTOR(S): Kato, Eiichi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 80 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.                           | KIND | DATE     | APPLICATION NO. | DATE         |
|--------------------------------------|------|----------|-----------------|--------------|
| JP 05210265                          | A2   | 19930820 | JP 1992-40508   | 199201<br>31 |
| PRIORITY APPLN. INFO.: JP 1992-40508 |      |          |                 | 199201<br>31 |

AB The title masters with good water retention and providing good print image and printing durability under severe conditions, useful in laser scanning exposure comprise at least one photoconductive layer containing binder resins on an elec. conductive support and a surface layer containing nonaq. dispersed resin particles. The resin particles are obtained by dispersion polymerization, in a nonaq. solvent, of monofunctional monomers containing  $\geq 1$  functional groups chosen from  $-W_1(CH_2)mCH:CH_2$  and  $-W_2(CH_2)nCH_2CH_2X$  ( $W_1, W_2 = SO_2, CO, O_2C$ ;  $m, n = 0, 1$ ;  $X = \text{halogen}$ ) and forming polymers insol. in the solvent and monofunctional comonomers containing Si and/or F in the presence of dispersion-stabilizing resins soluble in the polymerization medium. The binder resins have  $M_w$  1000-20,000, contain  $\geq 30\%$   $CH(a_1)C(a_2)(CO_2R_3)$  repeating unit and 0.5-15% polymer component having polar group(s) chosen from  $PO_3H_2, SO_3H, CO_2H, P(O)(OH)R_4$ , and cyclic acid anhydride group ( $a_1, a_2 = H, \text{halogen, cyano, hydrocarbyl}$ ;  $R_3 = \text{hydrocarbyl}$ ;  $R_4 = \text{hydrocarbyl, hydrocarbyloxy}$ ).

IT 135820-62-1P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (manufacture for binders in lithog. master manufacture)

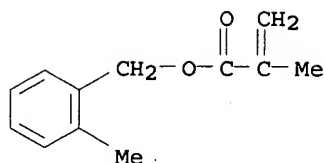
RN 135820-62-1 HCAPLUS

CN L-Aspartic acid, N-(1-oxo-2-propenyl)-, polymer with (2-methylphenyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 91990-22-6  
 CMF C12 H14 O2



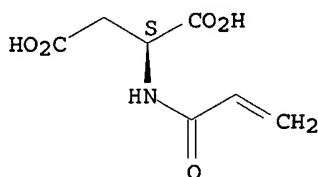


CM 2

CRN 70714-77-1

CMF C7 H9 N O5

Absolute stereochemistry.



IC ICM G03G0013-28

ICS G03G0005-05; G03G0005-06; G03G0005-147

CC 74-3 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)

IT 65697-21-4P, Benzyl methacrylate-methacrylic acid copolymer

65697-22-5P, Acrylic acid-benzyl methacrylate copolymer

126969-78-6P 130094-33-6P, 2-Carboxyethyl acrylate-2-chloro-6-

methylphenyl methacrylate copolymer 130952-79-3P 131808-63-4P

135740-18-0P 135740-30-6P, Acrylic acid-phenyl methacrylate

copolymer 135740-31-7P 135740-32-8P 135740-33-9P

135740-35-1P 135740-36-2P 135740-37-3P 135740-38-4P

135740-39-5P 135740-41-9P 135740-43-1P 135740-44-2P

135740-46-4P 135770-63-7P 135820-62-1P 139663-63-1P

142648-25-7P 146817-57-4P 146817-58-5P 146817-61-0P

147524-36-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered  
material use); PREP (Preparation); USES (Uses)

(manufacture for binders in lithog. master manufacture)

L32 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:496060 HCAPLUS

DOCUMENT NUMBER: 121:96060

TITLE: Electrophotographic lithographic printing plate  
having excellent water retention

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 89 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|-------------|------|----------|-----------------|----------|
| JP 05100462 | A2   | 19930423 | JP 1991-284154  | 19911004 |

PRIORITY APPLN. INFO.:

JP 1991-284154

199110  
04

&lt;--

AB In the title electrophotog. lithog. printing plate comprising  $\geq 1$  photoconductor layer on a conductive support and an uppermost surface layer, the uppermost surface layer contains  $\geq 1$  kind of nonaq. dispersion resin particles (L) and the photoconductor layer contains  $\geq 1$  kind of resin (A) as a binder resin:. The nonaq. dispersion resin particles (L) are made of a copolymer obtained in a nonaq. solvent by dispersion polymerization of a monofunctional monomer (C), which is soluble in the nonaq. solvent but insol. upon polymerization and is capable of forming  $\geq 1$  functional group having  $\geq 1$  COOH group upon decomposition, in the presence of a dispersion stabilizing resin which is soluble in the solvent containing F- and/or Si-bearing group in a repeating unit. The resin (A) has weight-average mol. weight 1000-20,000 and is made of a repeating unit  $[a_1HCCa_2(COOR_3)]$  [ $a_1, 2 = H, \text{halo, cyano, hydrocarbyl}; R_3 = \text{hydrocarbyl}$ ]  $\geq 30\%$  and a polymer component 0.5-15% containing  $\geq 1$  polar moiety selected from  $PO_3H_2$ ,  $SO_3H$ ,  $COOH$ ,  $P(=O)(OH)R_1$  [ $R_1 = \text{hydrocarbyl or } OR_2; R_2 = \text{hydrocarbyl}$ ], and cyclic anhydrides.

IT 135820-62-1P

RL: TEM (Technical or engineered material use); PREP (Preparation);  
USES (Uses)(preparation of, for electrophotog. materials for lithog.  
plate manufacture)

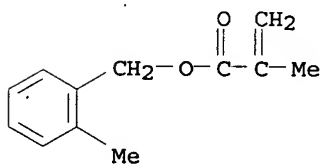
RN 135820-62-1 HCAPLUS

CN L-Aspartic acid, N-(1-oxo-2-propenyl)-, polymer with  
(2-methylphenyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 91990-22-6

CMF C12 H14 O2

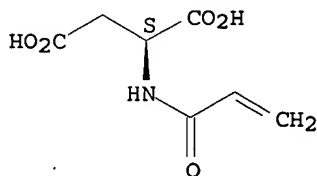


CM 2

CRN 70714-77-1

CMF C7 H9 N O5

Absolute stereochemistry.



IC ICM G03G0005-147

ICS G03G0005-05; G03G0005-06; G03G0013-28

CC 74-6 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)IT 65697-21-4P 65697-22-5P, Acrylic acid-benzyl methacrylate  
copolymer 126969-70-8P 126969-78-6P 130094-33-6P

130952-79-3P 131808-63-4P 135740-18-0P 135740-30-6P  
 135740-31-7P 135740-32-8P 135740-33-9P 135740-35-1P  
 135740-36-2P 135740-37-3P 135740-38-4P 135740-39-5P  
 135740-41-9P 135740-43-1P 135740-44-2P 135740-46-4P  
 135770-63-7P 135820-62-1P 139663-63-1P 142648-25-7P  
 145168-75-8P 145168-89-4P 145168-94-1P 145169-02-4P  
 145169-03-5P 145169-04-6P 145169-24-0P 145169-26-2P  
 145169-30-8P 145807-38-1P 145807-40-5P 145807-41-6P  
 145807-51-8P 145807-53-0P 145807-54-1P 145807-55-2P  
 145807-57-4P 145807-62-1P 145807-63-2P 145807-64-3P  
 145807-65-4P 145807-66-5P 145807-68-7P 145807-72-3P  
 145807-78-9P 145807-80-3P 146188-26-3DP, carboxy-terminated,  
 ester with 2-hydroxyethyl methacrylate 146817-57-4P 146817-58-5P  
 146817-61-0P 147524-36-5P 149072-24-2DP, reaction product with  
 2-isocyanatoethyl methacrylate 149072-28-6P 149072-31-1P  
 149072-33-3P 149072-36-6P 149072-38-8P 149072-39-9P  
 149072-47-9P 149072-48-0P 149072-49-1P 149072-50-4P  
 149072-52-6P 149072-53-7P 149072-55-9P 149072-56-0P  
 149072-99-1P 149093-43-6P 149093-44-7P 149093-46-9P  
 149093-47-0P 149368-83-2P 149434-15-1P 149434-25-3P  
 149434-28-6P 149658-55-9P 150103-52-9P 150103-59-6DP, reaction  
 product with cyanatoethyl methacrylate 154042-89-4P 154042-90-7P  
 154042-92-9P 154042-93-0P 154042-94-1P 154042-95-2P  
 154042-96-3P 154042-97-4P 154042-98-5P 154042-99-6P  
 154043-00-2P 154043-01-3P 154043-02-4P 154043-03-5P  
 154043-04-6P 154043-05-7P 154043-06-8P 154043-07-9P  
 154043-08-0P 154043-09-1P 154043-10-4P 154043-11-5P  
 154397-48-5P 154452-24-1P 154452-25-2P 154452-26-3P  
 154452-28-5P 154483-07-5P

RL: TEM (Technical or engineered material use); PREP (Preparation);

USES (Uses)

(preparation of, for electrophotog. materials for lithog.  
plate manufacture)

L32 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:311614 HCAPLUS

DOCUMENT NUMBER: 120:311614

TITLE: Electrophotographic lithographic printing plate  
with high sensitivity to semiconductor laser  
scanning method

INVENTOR(S): Kato, Eiichi; Kasai, Kyosuke

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 79 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE         |
|-------------|------|----------|-----------------|--------------|
| JP 05034947 | A2   | 19930212 | JP 1991-207238  | 199107<br>25 |

PRIORITY APPLN. INFO.:

JP 1991-207238

199107  
25

AB In an electrophotog. lithog. printing plate having  $\geq 1$   
photoconductor layer containing a photoconductive ZnO, a spectral  
sensitizing dye and a binder resin, the photoconductor layer  
contains  $\geq 1$  binder resin (A) and  $\geq 1$  kind of nonaq.  
dispersion resin particles (B) whose average grain diameter is smaller than  
or equal to a maximum grain diameter of the photoconductive ZnO

particles:. The binder resin (A) contains the repeating unit [a1HCCa2(COOR3)] [a1,2 = H, halo, cyano, hydrocarbon; R3 = hydrocarbon] having weight average mol. weight 1,000-20,000 as a polymer component  $\geq 30\%$  and another polymer component 0.5-15% containing  $\geq 1$  polar moiety selected from PO3H2, SO3H, COOH, P(:O)(OH)R1 [R1 = hydrocarbon, OR2; R2 = hydrocarbon], and a group containing cyclic anhydride. The nonaq. dispersion resin particles (B) are made of a copolymer obtained by dispersion polymerization of a monofunctional monomer (C) in the presence of a dispersion-stabilizing resin, which, soluble in the nonaq. solvent, contains a substituent containing Si and/or F, in which the monofunctional monomer (C) contains W1(CH2)n1HC:CH2 and/or W2(CH2)n2CH2CH2X [W1,2 = SO2, CO, OCO; n1, n2 = 0, 1; and X = halo] and is soluble in the nonaq. solvent but becoming insol. upon polymerization

IT 135820-62-1P

RL: PREP (Preparation)

(preparation of, electrophotog. lithog. printing plate from)

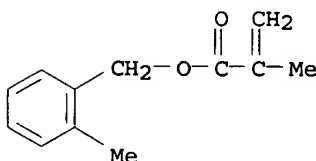
RN 135820-62-1 HCAPLUS

CN L-Aspartic acid, N-(1-oxo-2-propenyl)-, polymer with (2-methylphenyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 91990-22-6

CMF C12 H14 O2

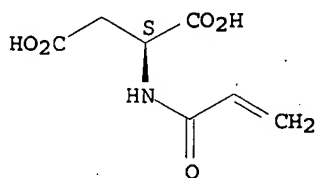


CM 2

CRN 70714-77-1

CMF C7 H9 N O5

Absolute stereochemistry.



IC ICM G03G0005-05

ICS G03G0005-05; G03G0005-06; G03G0005-08; G03G0013-28

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 65697-21-4P 65697-22-5P 126969-70-8P 126969-78-6P  
 130094-33-6P 130952-79-3P 131808-63-4P 135740-18-0P  
 135740-30-6P 135740-31-7P 135740-32-8P 135740-33-9P  
 135740-35-1P 135740-36-2P 135740-37-3P 135740-38-4P  
 135740-39-5P 135740-41-9P 135740-43-1P 135740-44-2P  
 135740-46-4P 135770-63-7P 135820-62-1P 139663-63-1P  
 142648-25-7P 145168-75-8P 145168-89-4P 145168-94-1P  
 145169-02-4P 145169-03-5P 145169-04-6P 145169-24-ODP,  
 carboxy-terminated, ester with 2-hydroxyethyl methacrylate  
 145807-38-1P 145807-40-5P 145807-51-8P 145807-53-0P  
 145807-54-1P 145807-55-2P 145807-56-3P 145807-62-1P

145807-63-2P 145807-64-3P 145807-65-4P 145807-66-5P  
 145807-68-7P 145807-70-1P 145807-71-2P 145807-72-3P  
 145807-78-9P 145807-80-3P 146188-26-3DP, carboxy-terminated,  
 ester with 2-hydroxyethyl methacrylate 146817-57-4P 146817-58-5P  
 146817-61-0P 147524-36-5P 150497-92-0P 151688-53-8P  
 151688-55-0P

RL: PREP (Preparation)

(preparation of, electrophotog. lithog. printing plate from)

L32 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:148984 HCAPLUS

DOCUMENT NUMBER: 120:148984

TITLE: Manufacture of lithographic printing plate  
 having excellent water-retaining properties

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 81 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE         |
|------------------------|------|----------|-----------------|--------------|
| JP 05100504            | A2   | 19930423 | JP 1991-289414  | 199110<br>09 |
| <--                    |      |          |                 |              |
| PRIORITY APPLN. INFO.: |      |          | JP 1991-289414  | 199110<br>09 |
| <--                    |      |          |                 |              |

AB The manufacture of a lithog. printing plate, which has  $\geq 1$  photoconductor layer on a conductive support and an uppermost surface layer, comprises effecting imagewise exposure of the lithog. printing plate containing nonaq. dispersion resin particles in the surface layer and and a binder resin in the photosensitive layer to form a toner image and desensitizing nonimage regions of the photoconductor layer with a solution containing a hydrophilic compound having a Pearson's nucleophilic constant  $\geq 5.5$ . The nonaq. dispersion resin particles are copolymer particles which are obtained by polymerizing in a nonaq. solvent a monofunctional monomer, which (soluble in the solvent but becoming insol. upon polymerization) contains formyl and/or CH(OA1)(OA2) [A1,2 = hydrocarbyl, organic residues combing together to form a ring], in the presence of a dispersion stabilizing resin made up of a repeating unit containing Si- and/or F-bearing substituent and the binder resin with a weight-average mol. weight 1000-20,000 contains a repeating unit [Ca1HCa2(COOR1)] [a1,2 = H, halo, cyano, hydrocarbyl; R1 = hydrocarbyl]  $\geq 30\%$  and a polymer component 0.5-15% containing  $\geq 1$  kind of a polar moiety selected from PO3H2, SO3H, COOH, P(=O)(OH)R2 [R2 = hydrocarbyl, OR3 R3 = hydrocarbyl] and a group containing cyclic anhydride.

IT 135820-62-1P

RL: TEM (Technical or engineered material use); PREP (Preparation);  
 USES (Uses)

(preparation of, for lithog. printing plate preparation)

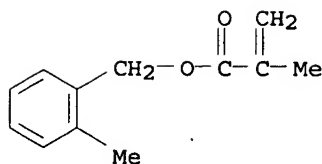
RN 135820-62-1 HCAPLUS

CN L-Aspartic acid, N-(1-oxo-2-propenyl)-, polymer with  
 (2-methylphenyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 91990-22-6

CMF C12 H14 O2

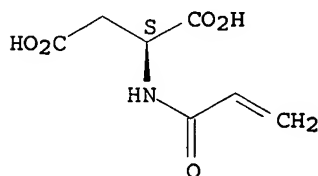


CM 2

CRN 70714-77-1

CMF C7 H9 N O5

Absolute stereochemistry.



IC ICM G03G0013-28  
ICS G03G0005-05; G03G0005-06; G03G0005-147  
CC 74-6 (Radiation Chemistry, **Photochemistry**, and  
Photographic and Other Reprographic Processes)  
IT 65697-21-4P 65697-22-5P 126969-78-6P 130094-33-6P  
130952-79-3P 131808-63-4P 135740-18-0P 135740-30-6P  
135740-31-7P 135740-32-8P 135740-33-9P 135740-35-1P  
135740-36-2P 135740-37-3P 135740-38-4P 135740-39-5P  
135740-41-9P 135740-43-1P 135740-44-2P 135740-46-4P  
135770-63-7P **135820-62-1P** 139663-63-1P 142648-25-7P  
145168-75-8P 145168-89-4P 145168-94-1P 145169-02-4P  
145169-03-5P 145169-04-6P 145169-24-0P 145169-26-2P  
145169-30-8P 145807-38-1P 145807-40-5P 145807-41-6P  
145807-51-8P 145807-53-0P 145807-54-1P 145807-55-2P  
145807-56-3P 145807-57-4P 145807-63-2P 145807-64-3P  
145807-65-4P 145807-66-5P 145807-68-7P 145807-70-1P  
145807-71-2P 145807-72-3P 145807-78-9P 145807-80-3P  
146188-26-3DP, carboxy-terminated, ester with 2-hydroxyethyl  
methacrylate 146817-57-4P 146817-58-5P 146817-61-0P  
146966-35-0P 147524-36-5P 147545-76-4P 149072-24-2DP, reaction  
product with 2-isocyanatoethyl methacrylate 149368-83-2P  
149368-85-4P 149434-15-1P 149434-21-9P 149434-25-3P  
149434-28-6P 149434-33-3P 149658-55-9P 149698-33-9P  
149698-34-0P 149698-35-1P 149698-37-3P 149698-38-4P  
149698-39-5P 149698-40-8P 149698-42-0P 149698-43-1P  
149698-46-4P 149698-47-5P 149698-48-6P 149698-49-7P  
149698-50-0P 149698-52-2P 149698-53-3P 149698-54-4P  
149698-55-5P 149698-56-6P 149698-57-7P 149698-58-8P  
149698-59-9P 149698-60-2P 149698-63-5P 149729-05-5P  
149729-07-7P 149729-28-2P 149729-30-6P 149729-31-7P  
149729-32-8P 149729-33-9P 149765-50-4P 149934-66-7P  
149962-75-4P 151864-21-0P 152586-80-6P 152586-81-7DP, reaction  
product with acrylamide 153147-24-1P  
RL: TEM (Technical or engineered material use); PREP (Preparation);  
USES (Uses)  
(preparation of, for lithog. printing plate preparation)

L32 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:148980 HCAPLUS

DOCUMENT NUMBER: 120:148980  
 TITLE: Manufacture of lithographic plate from electrophotographic photoreceptor  
 INVENTOR(S): Kato, Eiichi; Kasai, Kyosuke  
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 87 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE         |
|-------------|------|----------|-----------------|--------------|
| JP 05061214 | A2   | 19930312 | JP 1991-250310  | 199109<br>04 |
|             |      |          | JP 1991-250310  | 199109<br>04 |

AB The manufacture of a lithog. plate from an electrophotog. photoreceptor, which has  $\geq 1$  photosensitive layer containing at least photoconductive ZnO grains, a spectral sensitizing dye, and a binder resin on a conductive support, comprises effecting imagewise exposure of the electrophotog. photoreceptor containing the binder resin in the photosensitive layer and  $\geq 1$  kind of nonaq. dispersion resin grains having the average grain diameter equal to or smaller than that of the maximum grain diameter of the ZnO grains to form a toner image and effecting desensitization process of nonimage regions by using a solution containing a hydrophilic compound with Pearson's nucleophilic constant  $\geq 5.5$ ; The binder resin, with weight average mol. weight 1000-20,000, has a repeating unit  $[\text{CHa1Ca2COOR1}]$  [ $\text{a1,2} = \text{H, halo, cyano, hydrocarbyl}$ ;  $\text{R1} = \text{hydrocarbyl}$ ] as a polymer component  $\geq 30\%$  and another polymer component 0.5-15% containing  $\geq 1$  polar moiety selected from  $\text{PO3H2}$ ,  $\text{SO3H}$ ,  $\text{COOH}$ , and  $\text{P}(\text{:O})(\text{OH})\text{R2}$  [ $\text{R2} = \text{hydrocarbyl}$  or  $\text{OR3}$ ;  $\text{R3} = \text{hydrocarbyl}$ ] and a moiety containing a cyclic anhydride group. The nonaq. dispersion resin grains are made of a copolymer obtained through dispersion polymerization of a monofunctional monomer, which contains formyl and/or  $\text{CH}(\text{OA1})(\text{OA2})$  [ $\text{A1,2} = \text{hydrocarbyl}$ ] and is soluble in the nonaq. solvent but becoming insol. upon polymerization, with a monofunctional monomer containing Si and/or F.

IT 135820-62-1P

RL: PREP (Preparation)  
 (preparation of, for electrophotog. photoreceptor for lithog  
 . plate preparation)

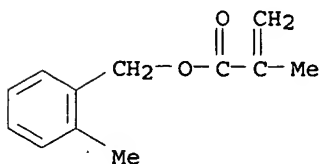
RN 135820-62-1 HCAPLUS

CN L-Aspartic acid, N-(1-oxo-2-propenyl)-, polymer with  
 (2-methylphenyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 91990-22-6

CMF C12 H14 O2

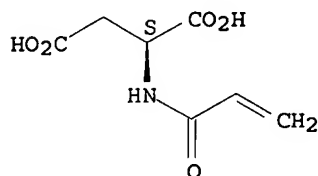


CM 2

CRN 70714-77-1

CMF C7 H9 N O5

Absolute stereochemistry.



IC ICM G03G0005-05  
ICS G03G0005-05; G03G0005-06; G03G0005-08; G03G0013-28  
CC 74-6 (Radiation Chemistry, **Photochemistry**, and  
Photographic and Other Reprographic Processes)  
IT 25719-51-1DP, 2-Ethylhexyl methacrylate homopolymer,  
carboxy-terminated, ester with 2-hydroxyethyl methacrylate  
52229-66-0P 65697-21-4P 65697-22-5P 126969-78-6P  
130094-33-6P 130952-79-3P 131808-63-4P 135740-18-0P  
135740-30-6P 135740-31-7P 135740-32-8P 135740-33-9P  
135740-35-1P 135740-36-2P 135740-37-3P 135740-38-4P  
135740-39-5P 135740-41-9P 135740-43-1P 135740-44-2P  
135740-46-4P 135770-63-7P **135820-62-1P** 139645-92-4P  
139663-63-1P 142648-25-7P 145807-49-4P 146817-57-4P  
146817-58-5P 146817-61-0P 147130-23-2P 147524-36-5P  
149072-21-9DP, reaction product with allylamine 149093-90-3DP,  
reaction product with isocyanoethyl methacrylate. 149234-56-0P  
149234-57-1P 149234-58-2P 149234-59-3P 149234-60-6P  
149234-61-7P 149234-63-9DP, reaction product with  
2-isocyanatoethyl methacrylate 149235-47-2P 149235-75-6P  
149265-77-0P 149295-65-8P 149295-66-9P 149295-67-0P  
149368-81-0P 149368-84-3P 149433-97-6P 149433-98-7P  
149433-99-8P 149434-02-6P 149434-04-8P 149434-06-0P  
149434-09-3P 149434-10-6P 149434-11-7P 149434-17-3P  
149434-22-0P 149434-38-8P 152640-58-9P 152640-60-3P  
152640-61-4P 152640-62-5P 152640-64-7P 152681-23-7P  
152681-24-8P 152681-25-9P 152681-27-1P 152681-47-5P  
152681-48-6P 152725-66-1P 152725-67-2P 152725-68-3P  
152725-69-4P 152725-70-7P 152725-71-8P 152725-72-9P  
152725-73-0P 152725-74-1P 152725-75-2P 152725-76-3P  
152725-77-4P 152725-78-5P 153014-29-0P  
RL: PREP (Preparation)  
(preparation of, for electrophotog. photoreceptor for lithog  
. plate preparation)

L32 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1994:120795 HCAPLUS  
DOCUMENT NUMBER: 120:120795  
TITLE: Electrophotographic lithographic printing plate  
giving high sensitivity to semiconductor laser  
scanning method  
INVENTOR(S): Kato, Eiichi; Kasai, Kyosuke  
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 74 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:



| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|-------------|------|----------|-----------------|----------|
| JP 05034948 | A2   | 19930212 | JP 1991-213047  | 19910731 |

PRIORITY APPLN. INFO.: JP 1991-213047 19910731

AB In an electrophotog. lithog. printing plate having  $\geq 1$  photoconductor layer containing a photoconductive ZnO, a spectral sensitizing dye and a binder resin, the photoconductor layer contains  $\geq 1$  following binder resin (A) and  $\geq 1$  kind of nonaq. dispersion resin particles (B) whose average grain diameter is smaller than or equal to the maximum grain diameter of the photoconductive ZnO particles. The binder resin (A) contains a repeating unit  $[a_1HCCa_2(COOR_3)]$  [ $a_1, 2 = H, \text{halo}, \text{cyano}, \text{hydrocarbon}$ ;  $R_3 = \text{hydrocarbon}$ ] having weight average mol. weight 1,000-20,000 as a polymer component  $\geq 30\%$  and further contains another polymer component 0.5-1% containing  $\geq 1$  polar moiety selected from  $PO_3H_2$ ,  $SO_3H$ ,  $COOH$ ,  $P(=O)(OH)R_1$  [ $R_1 = \text{hydrocarbon}$ ,  $OR_2$ ;  $R_2 = \text{hydrocarbon}$ ], and a group containing a cyclic anhydride. The nonaq. dispersion resin particles (B) are made of a copolymer obtained by dispersion polymerization of a monofunctional monomer (C) with a monofunctional monomer (D) in the presence of a dispersion-stabilizing resin soluble in the nonaq. solvent, in which the monofunctional monomer (C) contains  $W_1(CH_2)n_1HC:CH_2$  and/or  $W_2(CH_2)n_2CH_2CH_2X$  [ $W_1, 2 = SO_2, CO, OCO$ ;  $n_1, n_2 = 0, 1$ ; and  $X = \text{halo}$ ] and is soluble in the nonaq. solvent but becoming insol. upon polymerization and the monofunctional monomer (D) contains a substituent containing Si and/or F.

IT 135820-62-1P

RL: PREP (Preparation)

(preparation of, electrophotog. lithog. printing plate from)

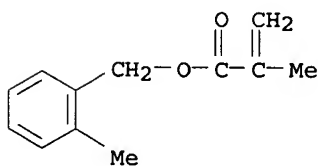
RN 135820-62-1 HCAPLUS

CN L-Aspartic acid, N-(1-oxo-2-propenyl)- polymer with (2-methylphenyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 91990-22-6

CMF C12 H14 O2

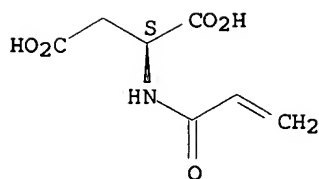


CM 2

CRN 70714-77-1

CMF C7 H9 N O5

Absolute stereochemistry.



IC ICM G03G0005-05  
 ICS G03G0005-05; G03G0005-06; G03G0005-08; G03G0013-28  
 CC 74-6 (Radiation Chemistry, **Photochemistry**, and  
 Photographic and Other Reprographic Processes)  
 IT 25719-51-1DP, 2-Ethylhexyl methacrylate homopolymer,  
 carboxy-terminated, ester with glycidyl methacrylate 52229-66-0P  
 65697-21-4P 65697-22-5P 126969-70-8P 126969-78-6P  
 130094-33-6P 130952-79-3P 131808-63-4P 135740-18-0P  
 135740-30-6P 135740-31-7P 135740-32-8P 135740-33-9P  
 135740-35-1P 135740-36-2P 135740-37-3P 135740-38-4P  
 135740-39-5P 135740-41-9P 135740-43-1P 135740-44-2P  
 135740-46-4P 135770-63-7P 135820-62-1P 139663-63-1P  
 142648-25-7P 145807-49-4P 146817-57-4P 146817-58-5P  
 146817-61-0P 147130-23-2P 147524-36-5P 149072-21-9DP, reaction  
 product with allylamine 149234-63-9DP, reaction product with  
 2-isocyanatoethyl methacrylate 149235-47-2P 149368-81-0P  
 149368-84-3P 149433-97-6P 149433-98-7P 149433-99-8P  
 149434-01-5P 149434-02-6P 149434-04-8P 149434-06-0P  
 149434-09-3P 149434-10-6P 149434-11-7P 149434-17-3P  
 149434-22-0P 149434-38-8P  
 RL: PREP (Preparation)  
 (preparation of, electrophotog. lithog. printing plate from)

L32 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1994:41999 HCAPLUS  
 DOCUMENT NUMBER: 120:41999  
 TITLE: Electrophotographic lithographic printing plate  
 giving high sensitivity to semiconductor laser  
 scanning method  
 INVENTOR(S): Kato, Eiichi; Kasai, Kyosuke  
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 84 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE         |
|-------------|------|----------|-----------------|--------------|
| JP 05034949 | A2   | 19930212 | JP 1991-213049  | 199107<br>31 |

PRIORITY APPLN. INFO.: JP 1991-213049

199107  
31

AB In an electrophotog. lithog. plate having  $\geq 1$  photoconductor  
 layer containing photoconductive ZnO grains, a spectral sensitizing dye  
 and a binder resin with the photoconductor layer containing  $\geq 1$   
 following binder resin (A) and  $\geq 1$  kind of nonaq. dispersion  
 resin particles (L) whose average grain diameter is smaller than or equal  
 to the maximum grain diameter of the photoconductive ZnO particles, a  
 toner image is formed on the photoreceptor by imagewise exposure

following elec. charging, and nonimage regions of the photoconductor layer are desensitized with a hydrophilic compound-containing solution having Pearson's nucleophilic constant  $\geq 5.5$ . The binder resin (A) (weight average mol. weight 1,000-20,000) contains a repeating unit [a1HC-Ca2(COOR3)] [a1,2 = H, halo, cyano, hydrocarbon; R3 = hydrocarbon] as a polymer component  $\geq 30\%$  and further contains a polymer component 0.5-15% having  $\geq 1$  polar moiety selected from PO3H2, SO3H, COOH, P(:O)(OH)R1 [R1 = hydrocarbon, OR2; R2 = hydrocarbon], and group containing cyclic anhydride. The nonaq. dispersion resin particles (L) are made of a copolymer obtained by dispersion polymerization of a monofunctional monomer (C) in the presence of a dispersion stabilizing resin, which, soluble in a nonaq. solvent, contains a repeating unit containing a moiety having Si and/or F, in which the monofunctional monomer (C), which, soluble in the nonaq. solvent but insol. upon polymerization, contains  $\geq 1$  functional group from formyl and/or HC(OA1)(OA2) [A1,2 = hydrocarbon; or may form a cyclic residue by combining together].

IT 135820-62-1P

RL: PREP (Preparation)

(preparation of, electrophotog. lithog. printing plate from)

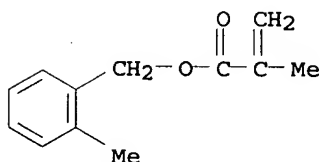
RN 135820-62-1 HCAPLUS

CN L-Aspartic acid, N-(1-oxo-2-propenyl)-, polymer with (2-methylphenyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 91990-22-6

CMF C12 H14 O2

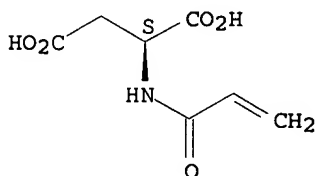


CM 2

CRN 70714-77-1

CMF C7 H9 N O5

Absolute stereochemistry.



IC ICM G03G0005-05

ICS G03G0005-05; G03G0005-06; G03G0005-08; G03G0013-28

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 65697-21-4P 65697-22-5P 126969-70-8P 126969-78-6P  
 130094-33-6P 130952-79-3P 131808-63-4P 135740-18-0P  
 135740-30-6P 135740-31-7P 135740-32-8P 135740-33-9P  
 135740-35-1P 135740-36-2P 135740-37-3P 135740-38-4P  
 135740-39-5P 135740-41-9P 135740-43-1P 135740-44-2P  
 135740-46-4P 135770-63-7P 135820-62-1P 139663-63-1P  
 142648-25-7P 145168-75-8P 145168-89-4P 145168-94-1P

145169-02-4P 145169-03-5P 145169-04-6P 145169-24-0P  
145169-30-8P 145807-38-1P 145807-40-5P 145807-51-8P  
145807-53-0P 145807-54-1P 145807-55-2P 145807-56-3P  
145807-62-1P 145807-63-2P 145807-64-3P 145807-65-4P  
145807-66-5P 145807-68-7P 145807-70-1P 145807-71-2P  
145807-72-3P 145807-78-9P 145807-80-3P 146188-26-3DP,  
carboxy-terminated, ester with 2-hydroxyethyl methacrylate.  
146817-57-4P 146817-58-5P 147524-36-5P 149072-24-2DP, reaction  
product with 2-isocyanatoethyl methacrylate 149368-83-2P  
149368-85-4P 149434-15-1P 149434-25-3P 149434-28-6P  
149434-33-3P 149658-55-9P 149698-39-5P 149698-40-8P  
149698-42-0P 149698-43-1P 149698-46-4P 149698-47-5P  
149698-48-6P 149698-49-7P 149698-50-0P 149698-51-1P  
149698-52-2P 149698-54-4P 149698-55-5P 149698-56-6P  
149698-57-7P 149698-58-8P 149698-59-9P 149698-60-2P  
149729-05-5P 149729-06-6P 149729-30-6P 149729-31-7P  
149729-32-8P 149729-33-9P 149765-50-4P 149934-66-7P  
150103-52-9P 150497-92-0P 151688-53-8P 151688-55-0P  
151709-96-5P 151709-97-6P 151754-98-2P 151754-99-3P  
151755-00-9P 151755-01-0P 151755-02-1P 151755-03-2P  
151755-05-4P 151755-06-5P 151755-07-6P 151864-21-0P  
152103-17-8P

RL: PREP (Preparation)

(preparation of, electrophotog. lithog. printing plate from)

L32 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:19181 HCAPLUS

DOCUMENT NUMBER: 120:19181

TITLE: Electrophotographic plate for lithographic  
platemaking

INVENTOR(S): Kato, Eiichi; Kasai, Kiyosuke; Yamazaki,  
Hirohisa

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE         |
|-------------|------|----------|-----------------|--------------|
| JP 04274433 | A2   | 19920930 | JP 1991-57644   | 199103<br>01 |

PRIORITY APPLN. INFO.:

JP 1991-57644

199103  
01

AB In the title electrophotog. plate obtained by coating an elec.  
conductive support with  $\geq 1$  photoconductive layer(s) containing  
photoconductive ZnO and a binder resin, the above photoconductive  
layer contains  $\geq 1$  resin(s) (A) as the above binder resin and  
 $\geq 1$  types of nonaq. solvent-dispersed resin particles of  
particle size equal to or smaller than that of the largest ZnO  
particles. The above resin (A) (mol. weight  $1 + 103-2 +$   
104) contains the monomer component CHal:Ca<sub>2</sub>CO<sub>2</sub>R (a<sub>1</sub>, a<sub>2</sub> = H, halo,  
CN, hydrocarbon group; R = hydrocarbon group)  $\geq 30\%$  and  
polymer component containing  $\geq 1$  polar group(s) PO<sub>3</sub>H<sub>2</sub>, SO<sub>3</sub>H, CO<sub>2</sub>H,  
P(O)(OH)R<sub>01</sub> [R<sub>01</sub> = hydrocarbon, OR<sub>02</sub> (R<sub>02</sub> = hydrocarbon group)] and  
a cycloacid anhydride 0.5-15%. The above nonaq. solvent-dispersed  
resin particles are obtained by dispersing and allowing to  
copolymerize a functional monomer (C) with (D) in the presence of a  
nonaq. solvent-soluble dispersion stabilizing resin; the above monomer

(C) containing  $\geq 1$  polar groups selected from CO<sub>2</sub>H, SO<sub>3</sub>H, sulfinic, phosphono group. P(O)(OH)R<sub>0</sub> [R<sub>0</sub> = hydrocarbon, OR<sub>10</sub> (R<sub>10</sub> = hydrocarbon group)], OH, formyl, amido, CN, NH<sub>2</sub>, cyclic acid anhydride-containing group, and N-containing heterocyclic group, and the above monomer (D) containing a Si- and/or F-containing group. The diffusion-stabilizing resin used contains polymerizable double bonds. The title printing plate gives superior printed copies, and shows good printing performance even under severe conditions, and the electrophotog. plate is very useful for laser scanning-exposure.

IT 135820-62-1P

RL: PREP (Preparation)

(preparation of, electrophotog. lithog. plate from)

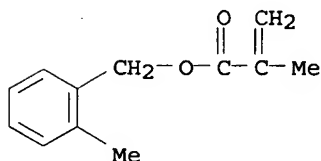
RN 135820-62-1 HCAPLUS

CN L-Aspartic acid, N-(1-oxo-2-propenyl)-, polymer with (2-methylphenyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 91990-22-6

CMF C12 H14 O2

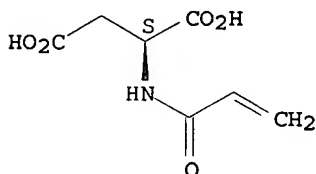


CM 2

CRN 70714-77-1

CMF C7 H9 N O5

Absolute stereochemistry.



IC ICM G03G0005-05

ICS G03G0005-05; G03G0005-08; G03G0013-28

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 65697-21-4P 65697-22-5P, Acrylic acid-benzyl methacrylate copolymer 126969-78-6P 130094-33-6P 130952-79-3P 131808-63-4P 135740-18-0P 135740-30-6P 135740-31-7P 135740-32-8P 135740-33-9P 135740-35-1P 135740-37-3P 135740-38-4P 135740-39-5P 135740-41-9P 135740-43-1P 135740-44-2P 135740-46-4P 135770-63-7P 135820-62-1P 139645-92-4P 139663-63-1P 146817-57-4P 146817-58-5P 146817-61-0P 147524-36-5P 151481-78-6P

RL: PREP (Preparation)

(preparation of, electrophotog. lithog. plate from)

L32 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:682268 HCAPLUS

DOCUMENT NUMBER: 119:282268

TITLE: Electrophotographic lithographic plate material

INVENTOR(S): Kato, Eiichi; Ishii, Kazuo  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE         |
|-------------|------|----------|-----------------|--------------|
| JP 04342261 | A2   | 19921127 | JP 1991-114632  | 199105<br>20 |

PRIORITY APPLN. INFO.:

<--  
 JP 1991-114632

199105  
20

AB In the title material having on an elec. conductive support  
 ≥1 photoconductive layer and a surface layer, the  
 photoconductive layer contains a sensitizing dye and a binder resin  
 containing ≥1 kind of resins having a weight average mol. weight  $1 \times 10^3$ - $2 \times 10^4$   
 and containing a polymer component >30% having repeating monomer  
 units  $[CHa1CHa2(CO2R3)]$  ( $a1, a2 = H, halo, CN, hydrocarbon$  group;  $R3$   
 = hydrocarbon group) and a polymer component 0.5-15 % having  
 ≥1 kind of polar groups selected from  $-PO3H2, -SO3H, -CO2H,$   
 $-P(:O)OHR1$  [ $R1 = hydrocarbon$  group,  $OR2$  ( $R2 = hydrocarbon$  group)],  
 and cyclic acid anhydride groups and the surface layer contains  
 ≥1 kind of resin particles dispersed in a nonaq. solvent  
 obtained by dispersion polymerization in the presence of a dispersion  
 stabilizing polymer soluble in the nonaq. solvent, of ≥1 kind of  
 monofunctional monomers which are soluble in the nonaq. solvent but  
 whose polymers are insol. in the nonaq. solvent and containing ≥1  
 kind of functional groups which form a OH group upon decomposition The  
 material gives lithog. plates which provide superior printed images  
 even under severe conditions and shows high durability and are  
 effective for scanning exposure using a semiconductor laser.

IT 135820-62-1P

RL: PREP (Preparation)

(preparation of, as binder resin for electrophotog. lithog.  
 plate material)

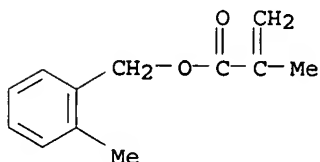
RN 135820-62-1 HCAPLUS

CN L-Aspartic acid, N-(1-oxo-2-propenyl)-, polymer with  
 (2-methylphenyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 91990-22-6

CMF C12 H14 O2

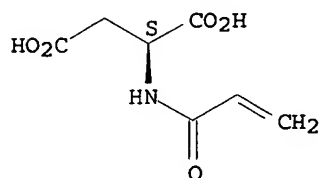


CM 2

CRN 70714-77-1

CMF C7 H9 N O5

Absolute stereochemistry.



IC ICM G03G0005-06  
ICS G03G0005-05; G03G0013-28  
CC 74-6 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)  
IT 135740-37-3P 135820-62-1P 139663-63-1P 142648-25-7P  
RL: PREP (Preparation)  
(preparation of, as binder resin for electrophotog. lithog.  
plate material)

L32 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1993:613948 HCAPLUS  
DOCUMENT NUMBER: 119:213948  
TITLE: Electrophotographic lithographic printing plate  
INVENTOR(S): Kato, Eiichi; Kasai, Seishi  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: PCT Int. Appl., 242 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.   | KIND     | DATE                 | APPLICATION NO. | DATE         |
|--|----------|----------------------|-----------------|--------------|
| WO 9218906   | A1       | 19921029             | WO 1992-JP465   | 199204<br>13 |
| <--  |          |                      |                 |              |
| W: US<br>RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE<br>JP 04314056 | A2       | 19921105             | JP 1991-106511  | 199104<br>12 |
| <--  |          |                      |                 |              |
| JP 3112176<br>JP 04362648  | B2<br>A2 | 20001127<br>19921215 | JP 1991-165249  | 199106<br>11 |
| <--  |          |                      |                 |              |
| JP 04362649  | A2       | 19921215             | JP 1991-165250  | 199106<br>11 |
| <--  |          |                      |                 |              |
| JP 05034946  | A2       | 19930212             | JP 1991-207237  | 199107<br>25 |
| <--  |          |                      |                 |              |
| JP 3112178<br>EP 535251  | B2<br>A1 | 20001127<br>19930407 | EP 1992-908530  | 199204<br>13 |
| <--  |          |                      |                 |              |
| EP 535251  | B1       | 19970730             |                 |              |

R: DE, GB  
US 5294507

A 19940315 US 1992-990338

199212  
14

PRIORITY APPLN. INFO.:

<--  
JP 1991-106511 A

199104  
12

<--  
JP 1991-165249 A

199106  
11

<--  
JP 1991-165250 A

199106  
11

<--  
JP 1991-207237 A

199107  
25

<--  
WO 1992-JP465 W

199204  
13

AB An electrophotog. lithog. printing plate having a photoconductive layer prepared by the dispersion polymerization of a resin (A) composed of polymer component with specified repeating units and a polar polymer component and having an average mol. weight of 1,000-20,000 and a monomer (C) with a functional group yielding, when decomposed, at least one group selected among thiol, sulfo, amino, and (Z0:)PR(Z0-H) [Z0 = O, S; R = Z0-H, hydrocarbon, Z0-R1 (R1 = hydrocarbon)] in the presence of a dispersion stabilizing resin soluble in a nonaq. solvent, said layer further containing dispersed resin particles (L) having Si- and/or F-containing substituents. This plate has good electrophotog. qualities and H2O retentivity in virtue of appropriate interactions among Zn oxide, a spectral sensitizer, the resin (A) and the resin particle (L), and gives excellent printed images with a high resistance to abrasion on the press even under severe conditions. Also, it works effectively in the scanning exposure using semiconductor laser beams.

IT 135820-62-1P

RL: PREP (Preparation)

(preparation of, electrophotog. lithog. printing plate from)

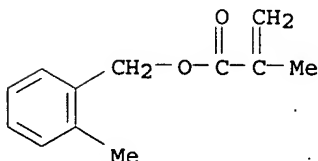
RN 135820-62-1 HCAPLUS

CN L-Aspartic acid, N-(1-oxo-2-propenyl)-, polymer with (2-methylphenyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 91990-22-6

CMF C12 H14 O2



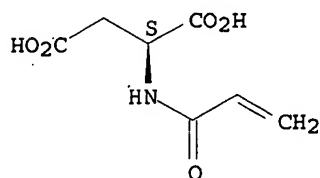
CM 2

CRN 70714-77-1



CMF C7 H9 N O5

Absolute stereochemistry.



IC ICM G03G0005-05  
 CC 74-3 (Radiation Chemistry, Photochemistry, and  
 Photographic and Other Reprographic Processes)  
 IT 9011-14-7DP, Methyl methacrylate homopolymer, carboxy-terminated  
 25719-51-1DP, carboxy-terminated, ester with 2-hydroxyethyl  
 methacrylate 52229-66-0P 65697-21-4P, Benzyl  
 methacrylate-methacrylic acid copolymer 65697-22-5P 126969-78-6P  
 128338-04-5P 128338-05-6P, Benzyl methacrylate-thiosalicylic acid  
 telomer 130094-33-6P 130952-79-3P 131808-63-4P 135740-18-0P  
 135740-30-6P 135740-31-7P 135740-32-8P 135740-33-9P  
 135740-35-1P 135740-37-3P 135740-38-4P 135740-39-5P  
 135740-41-9P 135740-43-1P 135740-44-2P 135740-46-4P  
 135740-47-5P 135770-63-7P 135820-62-1P 138059-26-4P  
 138059-27-5P 138059-28-6P 138059-30-0P 138059-31-1P  
 138059-32-2P 138059-33-3P 138059-34-4P 138059-35-5P  
 138059-36-6P 138123-83-8DP, carboxy-terminated 139357-81-6P  
 139645-92-4P 139989-86-9P 142199-53-9P 142648-25-7P  
 145168-75-8P 145168-89-4P 145168-94-1P 145169-02-4P  
 145169-03-5P 145169-04-6P 145169-26-2P 145169-30-8P  
 145807-40-5P 145807-41-6P 145807-49-4P 145807-51-8P  
 145807-53-0P 145807-54-1P 145807-55-2P 145807-56-3P  
 145807-57-4P 145807-62-1P 145807-63-2P 145807-65-4P  
 145807-66-5P 145807-68-7P 145807-70-1P 145807-71-2P  
 145807-72-3P 145807-78-9P 145807-80-3P 146188-26-3DP,  
 carboxy-terminated, ester with 2-hydroxyethyl methacrylate  
 146716-90-7P 146716-92-9P 146717-07-9P 146817-57-4P  
 146817-58-5P 146817-61-0P 147130-23-2P 147524-36-5P  
 149072-19-5P 149072-21-9DP, allyl amide 149072-24-2DP, reaction  
 product with 2-isocyanatoethyl methacrylate 149093-39-0P  
 149234-62-8P 149234-63-9DP, reaction product with  
 2-isocyanatoethyl methacrylate 149235-47-2P 149265-78-1P  
 149265-79-2P 149265-80-5P 149265-82-7P 149265-84-9P  
 149265-85-0P 149265-87-2P 149265-89-4P 149295-26-1P  
 149368-81-0P 149368-83-2P 149368-84-3P 149433-97-6P  
 149433-98-7P 149433-99-8P 149434-00-4P 149434-01-5P  
 149434-02-6P 149434-03-7P 149434-04-8P 149434-06-0P  
 149434-09-3P 149434-10-6P 149434-11-7P 149434-15-1P  
 149434-17-3P 149434-21-9P 149434-22-0P 149434-24-2P  
 149434-25-3P 149434-28-6P 149434-33-3P 149434-35-5P  
 149434-38-8P 149658-55-9P

RL: PREP (Preparation)

(preparation of, electrophotog. lithog. printing plate from)

L32 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1993:549517 HCAPLUS  
 DOCUMENT NUMBER: 119:149517  
 TITLE: Electrophotographic plate for lithographic plate  
 preparation  
 INVENTOR(S): Kato, Eiichi; Ishii, Kazuo  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent

LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|-------------|------|----------|-----------------|----------|
| JP 04251861 | A2   | 19920908 | JP 1991-26850   | 19910128 |
| JP 3048178  | B2   | 20000605 | JP 1991-26850   | 19910128 |

AB In the title electrophotog. plate employing  $\geq 1$  photoconductive layer containing photoconductive ZnO and a binder resin, the binder resin contains  $\geq 1$  resin (weight-average mol. weight 1 + 103-2 + 104) containing the repeating unit  $\text{CHa1Ca2}(\text{CO2R})$  [a1, a2 = H, halo, CN, hydrocarbon moiety; R = hydrocarbon moiety]  $\geq 30\%$  and a polymer component containing groups selected from  $\text{PO3H2}$ ,  $\text{SO3H}$ ,  $\text{CO2H}$ ,  $\text{PO}(\text{OH})\text{R1}$  (R1 = hydrocarbon moiety, oxyhydrocarbon moiety), and acid anhydride groups 0.5-15% and the photoconductive layer addnl. contains nonaq. solvent-dispersed resin particles of particle size equal to or less than that of the ZnO particles. The above nonaq. solvent-dispersed resin particles are obtained by dispersion polymerizing  $\geq 1$  monofunctional monomer containing  $\geq 1$   $\text{CO2H}$  precursor in the presence of a soluble dispersion-stabilizing resin.

IT 135820-62-1P

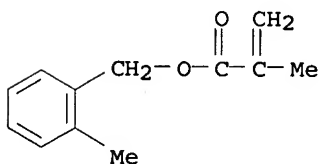
RL: TEM (Technical or engineered material use); PREP (Preparation);  
 USES (Uses)  
 (preparation of, as binder resin, for electrophotog. lithog. plates)

RN 135820-62-1 HCAPLUS

CN L-Aspartic acid, N-(1-oxo-2-propenyl)-, polymer with (2-methylphenyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

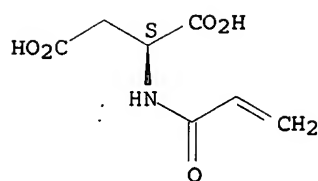
CRN 91990-22-6  
 CMF C12 H14 O2



CM 2

CRN 70714-77-1  
 CMF C7 H9 N O5

Absolute stereochemistry.



IC ICM G03G0005-05  
 ICS C08K0003-22; C08L0101-00; G03G0005-08; G03G0013-28  
 CC 74-6 (Radiation Chemistry, **Photochemistry**, and  
 Photographic and Other Reprographic Processes)  
 IT 65697-21-4P 65697-22-5P 126969-70-8P 126969-78-6P  
 130094-33-6P 130952-79-3P 131808-63-4P 135740-30-6P  
 135740-31-7P 135740-32-8P 135740-33-9P 135740-35-1P  
 135740-36-2P 135740-37-3P 135740-38-4P 135740-39-5P  
 135740-41-9P 135740-43-1P 135740-44-2P 135740-46-4P  
 135770-63-7P 135820-62-1P 139663-63-1P 142648-25-7P  
 146817-57-4P 146817-58-5P 146817-60-9P 146817-61-0P  
 RL: TEM (Technical or engineered material use); PREP (Preparation);  
 USES (Uses)  
 (preparation of, as binder resin, for electrophotog. lithog.  
 plates)

L32 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1993:179945 HCAPLUS  
 DOCUMENT NUMBER: 118:179945  
 TITLE: Electrophotographic lithographic platemaking  
 INVENTOR(S): Kato, Eiichi; Kasai, Kiyosuke  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 44 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE         |
|-------------|------|----------|-----------------|--------------|
| JP 04191754 | A2   | 19920710 | JP 1990-321214  | 199011<br>27 |

PRIORITY APPLN. INFO.: JP 1990-321214  
 199011  
 27

AB The title lithog. plate making involves imagewise exposing a claimed electrophotog. photoreceptor, toner developing, and desensitizing the toner nonbearing regions with a solution containing a hydrophilic compound containing a substituent(s) having a Pearson nucleophilic constant of  $\geq 5.5$ . The above electrophotog. photoreceptor utilizes  $\geq 1$  photoconductor layer and an uppermost surface layer containing a binder resin and resin particles containing  $\geq 1$  polymer components containing HCO and/or CH(OR1)(OR2) [R1, R2 = hydrocarbon moiety; R1, R2 may join to form a ring]. The electrophotog. plate shows good electrostatic properties (especially under severe operational conditions), produce clear high quality images, and yield high quality lithog. offset printing masters.

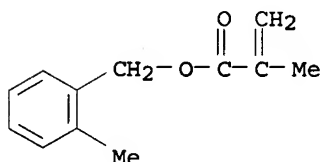
IT 135820-62-1P  
 RL: TEM (Technical or engineered material use); PREP (Preparation);  
 USES (Uses)  
 (preparation of, as binder resin, electrophotog. lithog.)

master using)

RN 135820-62-1 HCAPLUS  
 CN L-Aspartic acid, N-(1-oxo-2-propenyl)-, polymer with  
 (2-methylphenyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

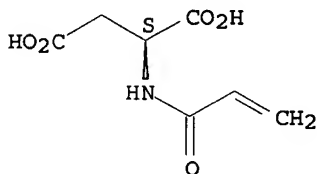
CRN 91990-22-6  
 CMF C12 H14 O2



CM 2

CRN 70714-77-1  
 CMF C7 H9 N O5

Absolute stereochemistry.



IC ICM G03G0013-28  
 ICS G03G0005-147  
 CC 74-3 (Radiation Chemistry, Photochemistry, and  
 Photographic and Other Reprographic Processes)  
 IT 27155-22-2P, Acrylic acid-methyl acrylate-methyl methacrylate  
 copolymer 65697-21-4P 126969-70-8P 130094-33-6P 130952-79-3P  
 131808-63-4P 135740-18-0P 135740-30-6P 135740-31-7P  
 135740-32-8P 135740-33-9P 135740-35-1P 135740-37-3P  
 135740-38-4P 135740-39-5P 135740-41-9P 135740-43-1P  
 135740-44-2P 135740-46-4P 135770-63-7P **135820-62-1P**  
 146817-57-4P 146817-58-5P 146817-60-9P 146817-61-0P  
 146817-67-6P 146817-68-7P 146842-16-2P  
 RL: TEM (Technical or engineered material use); PREP (Preparation);  
 USES (Uses)  
 (preparation of, as binder resin, electrophotog. lithog.  
 master using)

L32 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1992:48824 HCAPLUS

DOCUMENT NUMBER: 116:48824

TITLE: Electrophotographic photoreceptor sheet for lithographic platemaking

INVENTOR(S): Kato, Eiichi; Ishii, Kazuo

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE         |
|-------------|------|----------|-----------------|--------------|
| JP 03046665 | A2   | 19910227 | JP 1989-180559  | 198907<br>14 |
| JP 2647719  | B2   | 19970827 | JP 1989-180559  | 198907<br>14 |

PRIORITY APPLN. INFO.: <--

AB In the title electrophotog. photoreceptor sheet utilizing  $\geq 1$  photoconductor layer containing photoconductive ZnO and a binder resin, the photoconductive layer contains hydrophilic resin particles of average diameter less than that of the ZnO particles, and the binder resin contains  $\geq 1$  acrylate resin A and  $\geq 1$  acrylate resin B. Acrylate resin A contains a polymer component (weight-average mol. weight  $1 + 103 \cdot 2 + 104$ ) based on  $\text{CHa1:Ca2(CO2R1)}$  [ $\text{a1, a2} = \text{H, halo, CN, hydrocarbyl; R1} = \text{hydrocarbyl}$ ] ( $\text{I}$ )  $\geq 30\%$  and a polymer component containing polar groups selected from  $\text{PO3H2, SO3H, CO2H, P(O)(OH)R}$  [ $\text{R} = \text{hydrocarbyl, OR' (R' = hydrocarbyl)}$ ], and cyclic acid anhydride-containing group; and acrylate resin B contains polymer component I (weight-average mol. weight  $3 + 104 \cdot 1 + 106$ )  $\geq 50\%$  and the 2nd polymer component of resin A 0-5%.

IT 137625-66-2

RL: USES (Uses)

(binder resin containing, for electrophotog. photoreceptor sheet for lithog. platemaking)

RN 137625-66-2 HCAPLUS

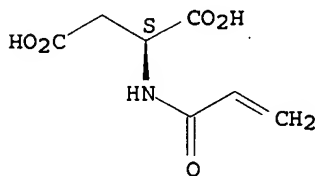
CN L-Aspartic acid, N-(1-oxo-2-propenyl)-, polymer with 2-acetylphenyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 70714-77-1

CMF C7 H9 N O5

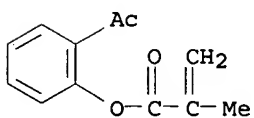
Absolute stereochemistry.



CM 2

CRN 46404-03-9

CMF C12 H12 O3



IC ICM G03G0005-05

ICS C08L0101-00; G03G0013-28

ICA C08F0030-02  
 CC 74-3 (Radiation Chemistry, Photochemistry, and  
 Photographic and Other Reprographic Processes)  
 IT 65697-21-4 126969-79-7 126969-94-6 131808-91-8 137560-69-1  
 137560-70-4 137560-71-5 137560-73-7 137560-76-0 137560-77-1  
 137625-66-2 137991-40-3 137991-41-4 137991-51-6  
 137991-53-8 137991-54-9 137991-55-0 137991-56-1  
 RL: USES (Uses)  
 (binder resin containing, for electrophotog. photoreceptor sheet for  
 lithog. platemaking)

=> file reg

FILE 'REGISTRY' ENTERED AT 12:09:26 ON 07 NOV 2006  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
 provided by InfoChem.

=> d l31 que stt

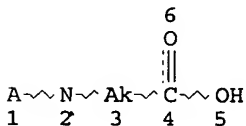
'STT' IS NOT VALID HERE

For an explanation, enter "HELP DISPLAY QUERY".

=> d l31 que stat

L7 SCR 2043

L9 STR



NODE ATTRIBUTES:

NSPEC IS RC AT 1

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

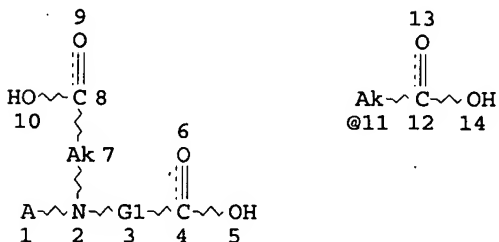
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE

L10 STR



VAR G1=AK/11

NODE ATTRIBUTES:

NSPEC IS RC AT 1

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L13 11036 SEA FILE=REGISTRY SSS FUL L9 AND L7  
L15 720 SEA FILE=REGISTRY SUB=L13 SSS FUL L10  
L19 491 SEA FILE=HCAPLUS ABB=ON PLU=ON L15  
L21 34 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 (L) (PLANOG? OR  
LITHO?)  
L22 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 (L) (PLANOG? OR  
LITHO?) (L) ?CURSOR?  
L23 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 (L) (PLANOG? OR  
LITHO?) AND ?CURSOR?  
L24 34 SEA FILE=HCAPLUS ABB=ON PLU=ON L21 OR L22 OR L23  
L25 33 SEA FILE=HCAPLUS ABB=ON PLU=ON L24 AND PHOTOCHEM?/SC,SX  
L31 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 AND (1840-2003)/PRY,  
PY,AY

=> file hcaplus

FILE 'HCAPLUS' ENTERED AT 12:09:40 ON 07 NOV 2006  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

=> d l31 1-9 ibib abs hitstr hitind

L31 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:610892 HCAPLUS

DOCUMENT NUMBER: 143:142783

TITLE: Lithographic printing master plate having  
specific carbon/aluminum ratio in anodized film  
and lithographic printing method

INVENTOR(S): Makino, Naonori; Inno, Norifumi; Hotta, Hisashi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 76 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| JP 2005186505 | A2   | 20050714 | JP 2003-432323  | 20031226 |

PRIORITY APPLN. INFO.:

JP 2003-432323

20031226

AB Disclosed is a lithog. printing master plate comprising an Al support, an anodized film, and a recording layer, wherein the fracture surface of the anodized film after forming the recording layer thereon has a C/Al ratio  $\leq 1.0$ . Between the support and the recording layer, an underlayer containing a hydrophilic copolymer is interposed.

IT 849467-49-8

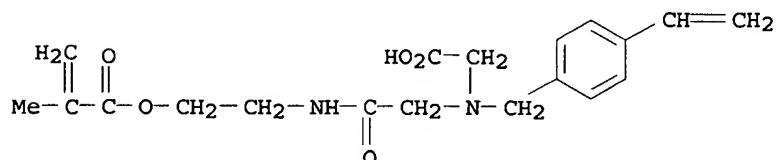
RL: DEV (Device component use); USES (Uses)  
(lithog. printing master plate containing hydrophilic copolymer underlayer)

RN 849467-49-8 HCAPLUS  
 CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer  
 with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]amino  
 ]ethyl 2-methyl-2-propenoate and N-(1-methylethyl)-2-propenamide  
 (9CI) (CA INDEX NAME)

CM 1

CRN 849467-47-6

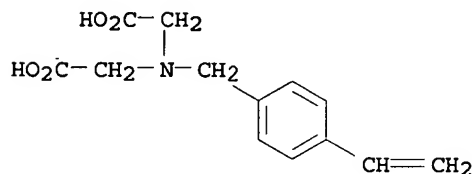
CMF C19 H24 N2 O5



CM 2

CRN 46917-20-8

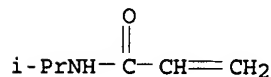
CMF C13 H15 N O4



CM 3

CRN 2210-25-5

CMF C6 H11 N O



IC ICM B41N0003-03  
 ICS B41N0001-14; G03F0007-00; G03F0007-038; G03F0007-09;  
 G03F0007-11  
 CC 74-6 (Radiation Chemistry, **Photochemistry**, and  
 Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 38  
 IT 79062-71-8 83176-82-3 494228-73-8 849467-45-4  
 849467-49-8 857906-53-7 857906-54-8 857906-55-9  
 858125-27-6 858125-28-7 858125-29-8 858125-30-1  
 RL: DEV (Device component use); USES (Uses)  
 (lithog. printing master plate containing hydrophilic  
 copolymer underlayer)

L31 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:608856 HCAPLUS

DOCUMENT NUMBER: 143:123075

TITLE: Lithography printing plate support having  
 copolymer capable of interacting with the



INVENTOR(S): support and lithography printing master plate  
 Makino, Naonori; Inno, Norifumi; Hotta, Hisashi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 74 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| JP 2005186504 | A2   | 20050714 | JP 2003-432321  | 20031226 |

PRIORITY APPLN. INFO.: JP 2003-432321  
 20031226

AB Disclosed is lithog. printing plate support comprising an image recording layer on a hydrophilic support, wherein the image-recording layer or other layers such as a underlayer on the support contains (a) a repeating unit having  $\geq 1$  ethylenic unsatd. bond (b) a copolymer having a repeating unit capable of interacting with the support surface. The copolymer has a hydrophilic group therein.

IT 849467-50-1

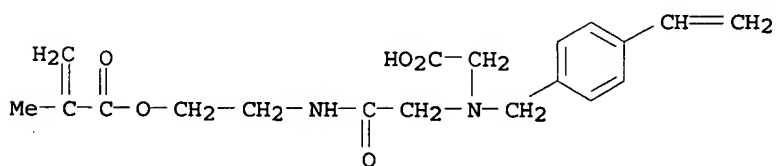
RL: DEV (Device component use); USES (Uses)  
 (lithog. printing plate support having copolymer capable of interacting with aluminum support)

RN 849467-50-1 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]amino]ethyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

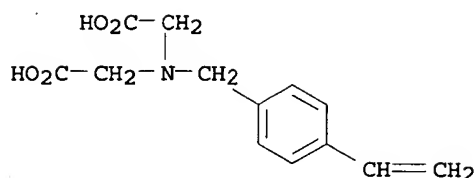
CM 1

CRN 849467-47-6  
 CMF C19 H24 N2 O5



CM 2

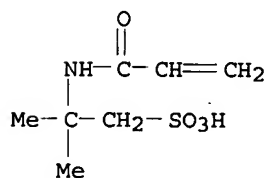
CRN 46917-20-8  
 CMF C13 H15 N O4



CM 3

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

IC ICM B41N0001-08  
 ICS C23C0022-34; C23C0022-83; C25D0011-18; G03F0007-00;  
 G03F0007-038; G03F0007-09; G03F0007-11  
 CC 74-6 (Radiation Chemistry, **Photochemistry**, and  
 Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 38  
 IT 79062-71-8 849467-39-6 849467-45-4 **849467-50-1**  
 857906-53-7 857906-54-8 857906-55-9  
 RL: DEV (Device component use); USES (Uses)  
 (lithog. printing plate support having copolymer  
 capable of interacting with aluminum support)

L31 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:303261 HCAPLUS

DOCUMENT NUMBER: 142:382218

TITLE: Lithographic printing plate precursor  
and lithographic printing methodINVENTOR(S): Makino, Naonori; Inno, Toshifumi; Yamasaki,  
Sumiaki

PATENT ASSIGNEE(S): Japan

SOURCE: U.S. Pat. Appl. Publ., 35 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| US 2005074692 | A1   | 20050407 | US 2004-951700  | 20040929 |
| JP 2005125749 | A2   | 20050519 | JP 2004-265735  | 200409   |

Ross Shippe EIC 1700 Remsen 4B31 571/272-6018

EP 1520694

A2

20050406

EP 2004-23373

13

200409

30

EP 1520694

A3

20051207

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,  
PL, SK, HR

PRIORITY APPLN. INFO.:

JP 2003-339391

A

200309

30

AB A lithog. printing plate precursor comprises: a support;  
and at least one layer comprising an image-recording layer, the  
image-recording layer comprising (A) an IR absorber, (B) a polymerization  
initiator, (C) a polymerizable compound, and (D) a binder polymer,  
wherein the image recording layer is capable of being removed with  
at least one of a printing ink and a fountain solution, wherein at  
least one of said at least one layer comprises a copolymer having  
(a1) a unit comprising at least one ethylenically unsatd. bond, and  
(a2) a unit comprising at least one functional group interacting  
with a surface of the support. And a lithog. printing method in  
which the lithog. printing plate precursor is used. The  
copolymer preferably has a hydrophilic segment. The copolymer  
preferably is contained in an undercoat layer formed between the  
support and the image-recording layer.

IT 194715-96-3P 849467-41-0P 849467-48-7P  
849467-49-8P 849467-50-1P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or  
engineered material use); PREP (Preparation); USES (Uses)  
(lithog. printing plate precursor containing)

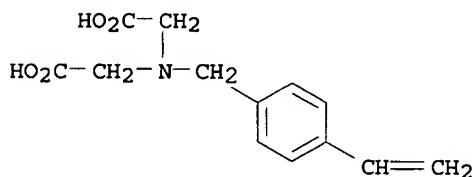
RN 194715-96-3 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer  
with 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX  
NAME)

CM 1

CRN 46917-20-8

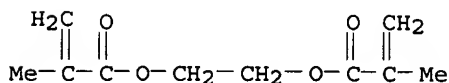
CMF C13 H15 N O4



CM 2

CRN 97-90-5

CMF C10 H14 O4



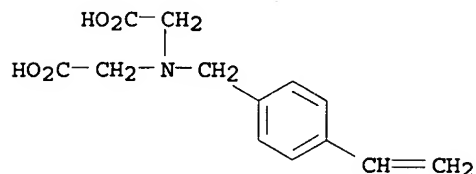
RN 849467-41-0 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, disodium salt, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 68517-06-6

CMF C13 H15 N O4 . 2 Na

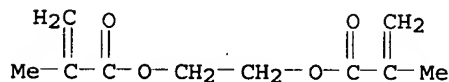


● 2 Na

CM 2

CRN 97-90-5

CMF C10 H14 O4



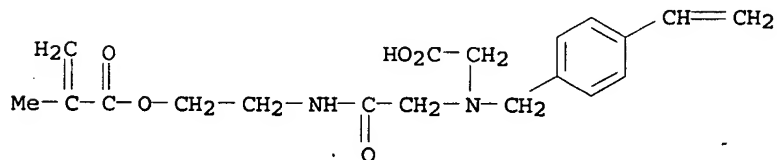
RN 849467-48-7 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, disodium salt, polymer with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 849467-47-6

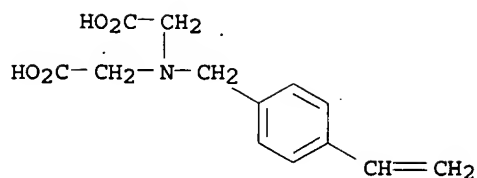
CMF C19 H24 N2 O5



CM 2

CRN 68517-06-6

CMF C13 H15 N O4 . 2 Na



●2 Na

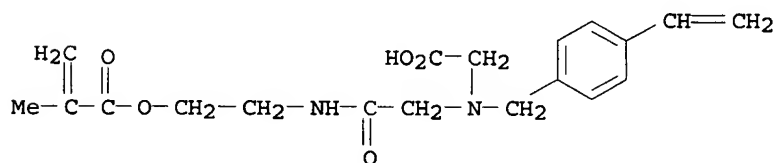
RN 849467-49-8 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer  
 with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]amino  
 ]ethyl 2-methyl-2-propenoate and N-(1-methylethyl)-2-propenamide  
 (9CI) (CA INDEX NAME)

.CM 1

CRN 849467-47-6

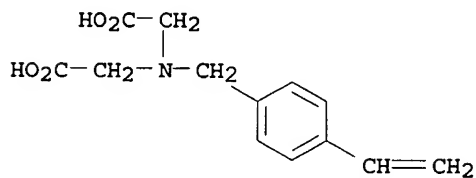
CMF C19 H24 N2 O5



CM 2

CRN 46917-20-8

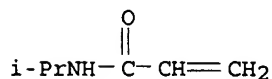
CMF C13 H15 N O4



CM 3

CRN 2210-25-5

CMF C6 H11 N O



RN 849467-50-1 HCAPLUS

CN Glycine; N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer  
 with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]amino  
 ]ethyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-



(lithog. printing plate precursor and lithog. printing method)

IT 83176-82-3P 93441-11-3P 194715-96-3P 849467-38-5P  
 849467-39-6P 849467-40-9P 849467-41-0P 849467-43-2P  
 849467-44-3P 849467-45-4P 849467-46-5P 849467-48-7P  
 849467-49-8P 849467-50-1P 849467-51-2P  
 849467-52-3P 849467-53-4P 849467-54-5P 849467-55-6P  
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (lithog. printing plate precursor containing)

L31 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:209588 HCAPLUS

DOCUMENT NUMBER: 142:287840

TITLE: Image recording material and planographic printing plate

INVENTOR(S): Kawauchi, Ikuo; Imai, Masako; Takahashi, Miki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 57 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| EP 1513016  | A2   | 20050309 | EP 2004-21306   | 20040908 |
| EP 1513016  | A3   | 20060125 |                 |          |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR |      |          |                 |          |
| JP 2005107484   | A2   | 20050421 | JP 2004-120694  | 20040415 |
| US 2005058936   | A1   | 20050317 | US 2004-934731  | 20040907 |
| PRIORITY APPLN. INFO.:  |      |          | JP 2003-315290  | 20030908 |
|   |      |          | JP 2004-120694  | 20040415 |

AB The present invention provides an image recording material comprising a substrate, an intermediate layer, and a photosensitive layer containing a novolak phenolic resin and a light to heat conversion agent and being recordable with an IR laser. The intermediate layer and photosensitive layer are sequentially provided on the substrate. The intermediate layer contains a polymer having an acidic group and being capable of interacting with the novolak phenolic resin contained in the photosensitive layer. A planog. printing plate excellent in chemical resistance and printing durability is obtained by heat-treating the image recording material at 150 to 300° after effecting image-wise exposure with an IR laser and development.

IT 30395-28-9 761445-16-3 761445-17-4

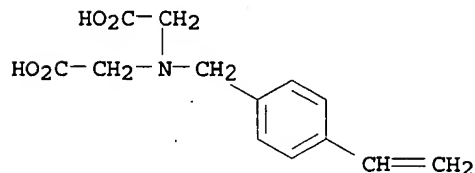
RL: NUU (Other use, unclassified); USES (Uses)

(planog. printing plate containing polymer in intermediate layer)

RN 30395-28-9 HCAPLUS  
CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

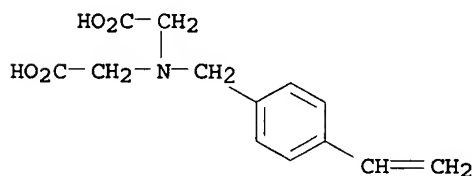
CRN 46917-20-8  
CMF C13 H15 N O4



RN 761445-16-3 HCAPLUS  
CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride (9CI) (CA INDEX NAME)

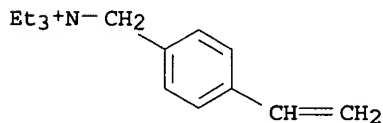
CM 1

CRN 46917-20-8  
CMF C13 H15 N O4



CM 2

CRN 14350-43-7  
CMF C15 H24 N . Cl



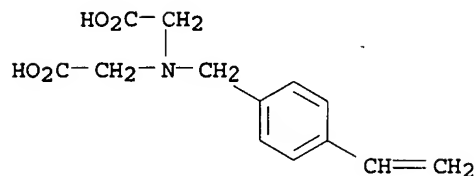
● Cl<sup>-</sup>

RN 761445-17-4 HCAPLUS  
CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

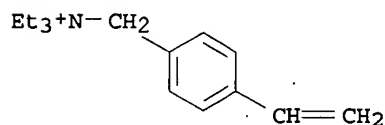


CRN 46917-20-8  
CMF C13 H15 N O4



CM 2

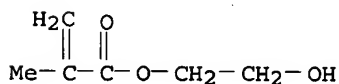
CRN 14350-43-7  
CMF C15 H24 N . Cl



● Cl<sup>-</sup>

CM 3

CRN 868-77-9  
CMF C6 H10 O3



IC ICM G03F0007-11  
ICS B41C0001-10; B41M0005-40  
CC 74-6 (Radiation Chemistry, **Photochemistry**, and  
Photographic and Other Reprographic Processes)  
Section cross-reference(s): 38  
IT 30395-28-9 220227-02-1 669013-40-5 761445-16-3  
761445-17-4 847043-64-5  
RL: NUU (Other use, unclassified); USES (Uses)  
(**planog.** printing plate containing polymer in intermediate  
layer)

L31 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:181138 HCAPLUS  
DOCUMENT NUMBER: 142:287833  
TITLE: Image recording material and planographic  
printing plate  
INVENTOR(S): Kawauchi, Ikuo; Takahashi, Miki; Imai, Masako  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Eur. Pat. Appl., 45 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO.  | DATE       |
|---|------|----------|------------------|------------|
| EP 1510866  | A2   | 20050302 | EP 2004-20546    | 20040830   |
| EP 1510866  | A3   | 20060125 |                  |            |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR |      |          |                  |            |
| JP 2005099685   | A2   | 20050414 | JP 2004-120695   | 20040415   |
| US 2005048399   | A1   | 20050303 | US 2004-928170   | 20040830   |
| CN 1591183  | A    | 20050309 | CN 2004-10074832 | 20040830   |
| PRIORITY APPLN. INFO.:  |      |          |                  |            |
|   |      |          | JP 2003-306918   | A 20030829 |
|   |      |          | JP 2004-120695   | A 20040415 |

AB An image recording material of the present invention comprises an anodized aluminum support, an intermediate layer containing a polymer having a carboxylic acid group in a side chain thereof and formed on the aluminum support, and a photosensitive layer containing at least 50% or more of novolak type phenol resin and a photothermal conversion agent and recordable by IR laser beam. A planog. printing plate excellent in printing durability can be obtained by subjecting the image recording material imagewise to IR laser exposure treatment and to development treatment, and then heating the image recording material at 150 to 300°C.

IT 30395-28-9 761445-17-4 847043-66-7

RL: TEM (Technical or engineered material use); USES (Uses)  
(resin; image recording material for planog. printing plate containing)

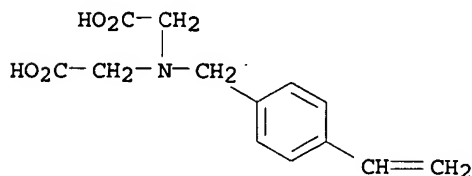
RN 30395-28-9 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 46917-20-8

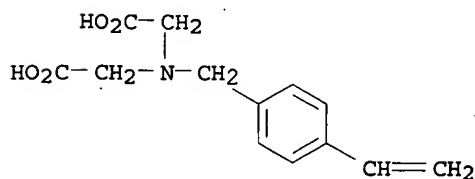
CMF C13 H15 N O4



RN 761445-17-4 HCAPLUS  
 CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

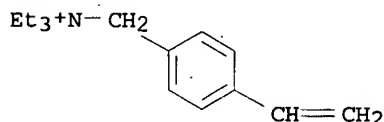
CM 1

CRN 46917-20-8  
 CMF C13 H15 N O4



CM 2

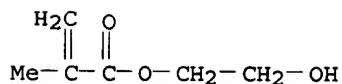
CRN 14350-43-7  
 CMF C15 H24 N . Cl



● Cl<sup>-</sup>

CM 3

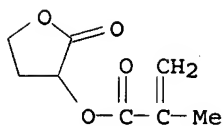
CRN 868-77-9  
 CMF C6 H10 O3



RN 847043-66-7 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]glycine and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

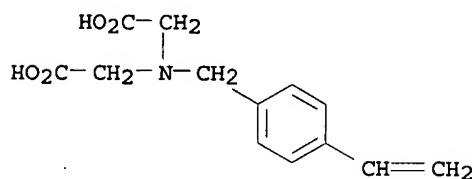
CRN 195000-66-9  
 CMF C8 H10 O4



CM 2

CRN 46917-20-8

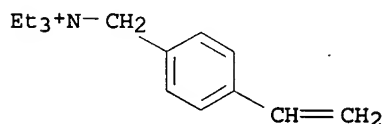
CMF C13 H15 N O4



CM 3

CRN 14350-43-7

CMF C15 H24 N . Cl

● Cl<sup>-</sup>

IC ICM G03F0007-11

ICS B41C0001-10; B41N0001-08; B41N0001-14; B41M0005-36

CC 74-6 (Radiation Chemistry, **Photochemistry**, and  
Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

IT 30395-28-9 220227-02-1 761445-17-4 847043-64-5  
847043-65-6 847043-66-7RL: TEM (Technical or engineered material use); USES (Uses)  
(resin; image recording material for **planog.** printing  
plate containing)

L31 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:98290 HCAPLUS

DOCUMENT NUMBER: 142:186587

TITLE: Positive-working presensitized lithographic  
plates for heat-mode laser platemaking

INVENTOR(S): Kawauchi, Ikuo; Takahashi, Miki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| JP 2005031539 | A2   | 20050203 | JP 2003-272809  | 20030710 |

PRIORITY APPLN. INFO.:

<--

JP 2003-272809

20030710

AB The plates have, on supports, sequential layers of lactone-bearing polymer interlayers and recording layers containing alkali-soluble resins, novolaks, and photothermal converters.

IT 832730-91-3

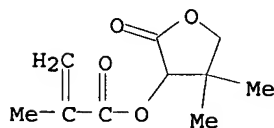
RL: TEM (Technical or engineered material use); USES (Uses)  
(interlayers; pos. lithog. plates having lactone-containing polymer interlayers and photothermal converter-containing recording layers)

RN 832730-91-3 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and tetrahydro-4,4-dimethyl-2-oxo-3-furanyl 2-methyl-2-propenoate (9CI)  
(CA INDEX NAME)

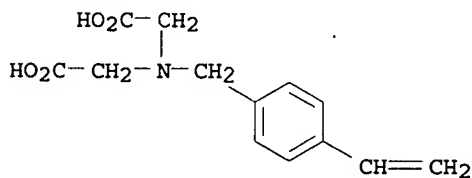
CM 1

CRN 156938-13-5  
CMF C10 H14 O4



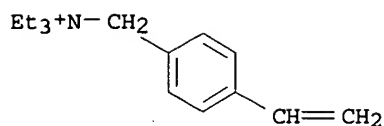
CM 2

CRN 46917-20-8  
CMF C13 H15 N O4



CM 3

CRN 14350-43-7  
CMF C15 H24 N . Cl



● Cl<sup>-</sup>

IC ICM G03F0007-00  
ICS G03F0007-004; G03F0007-032; G03F0007-11  
CC 74-6 (Radiation Chemistry, **Photochemistry**, and  
Photographic and Other Reprographic Processes)  
Section cross-reference(s): 38  
IT 669013-38-1 669013-40-5 832730-88-8 832730-89-9 832730-90-2  
832730-91-3 832743-68-7 832743-70-1  
RL: TEM (Technical or engineered material use); USES (Uses)  
(interlayers; pos. lithog. plates having lactone-containing  
polymer interlayers and photothermal converter-containing recording  
layers)

L31 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:780219 HCAPLUS  
DOCUMENT NUMBER: 141:304302  
TITLE: Planographic printing plate precursor  
INVENTOR(S): Takahashi, Miki; Sasaki, Hidehito; Hotta,  
Hisashi  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: U.S. Pat. Appl. Publ., 34 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO.  | DATE       |
|------------------------|------|----------|------------------|------------|
| US 2004185375          | A1   | 20040923 | US 2004-803999   | 20040319   |
| JP 2005157246          | A2   | 20050616 | JP 2004-73073    | 20040315   |
| CN 1532051             | A    | 20040929 | CN 2004-10030230 | 20040322   |
| PRIORITY APPLN. INFO.: |      |          | JP 2003-78699    | A 20030320 |
|                        |      |          | JP 2003-374189   | A 20031104 |

AB The present invention provides a planog. printing plate precursor having an intermediate layer containing a polymer having a structure represented by the formula YR<sub>1</sub>NR<sub>2</sub>-COOH (Y = connecting group connected with main chain of polymer; R<sub>1</sub> = hydrogen atom or hydrocarbon group; and R<sub>2</sub> = divalent hydrocarbon group.) at

its side chain and an IR laser photosensitive pos. recording layer, disposed on a support in this order.

IT 761445-14-1 761445-15-2 761445-16-3

761445-17-4 761445-18-5 761445-20-9

RL: NUU (Other use, unclassified); USES (Uses)

(planog. printing plate containing polymer in intermediate layer)

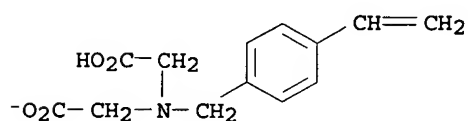
RN 761445-14-1 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, ion(1-), N,N,N-triethylethanaminium, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 761445-13-0

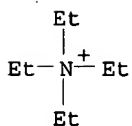
CMF C13 H14 N O4



CM 2

CRN 66-40-0

CMF C8 H20 N



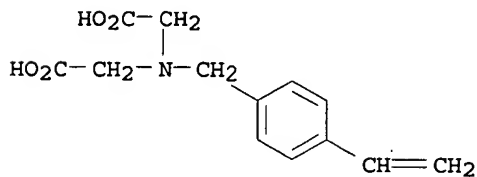
RN 761445-15-2 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 46917-20-8

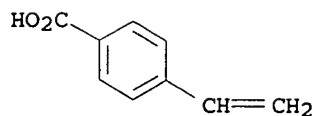
CMF C13 H15 N O4



CM 2

CRN 1075-49-6

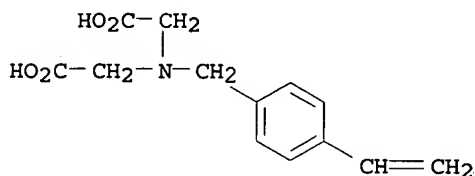
CMF C9 H8 O2



RN 761445-16-3 HCAPLUS  
 CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer  
 with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride (9CI)  
 (CA INDEX NAME)

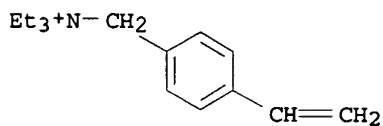
CM 1

CRN 46917-20-8  
 CMF C13 H15 N O4



CM 2

CRN 14350-43-7  
 CMF C15 H24 N . Cl

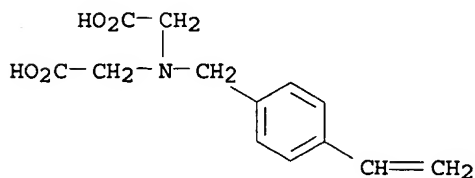


● Cl<sup>-</sup>

RN 761445-17-4 HCAPLUS  
 CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer  
 with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and  
 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 46917-20-8  
 CMF C13 H15 N O4

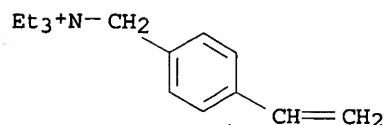




CM 2

CRN 14350-43-7

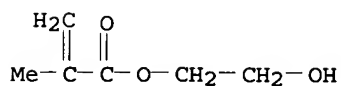
CMF C15 H24 N . Cl



CM 3

CRN 868-77-9

CMF C6 H10 O3



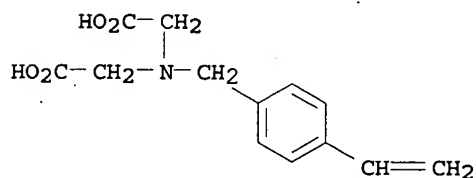
RN 761445-18-5 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl hydrogen butanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 46917-20-8

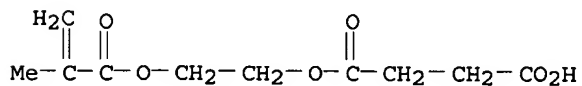
CMF C13 H15 N O4



CM 2

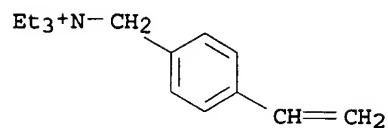
CRN 20882-04-6

CMF C10 H14 O6



CM 3

CRN 14350-43-7  
CMF C15 H24 N . Cl

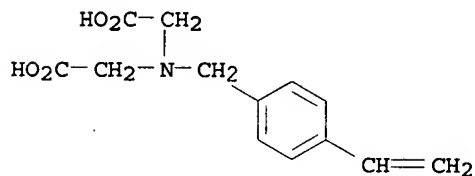


● Cl<sup>-</sup>

RN 761445-20-9 HCAPLUS  
CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

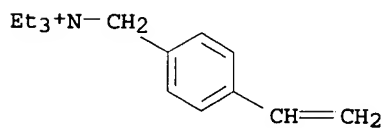
CM 1

CRN 46917-20-8  
CMF C13 H15 N O4



CM 2

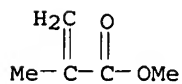
CRN 14350-43-7  
CMF C15 H24 N . Cl



● Cl<sup>-</sup>

CM 3

CRN 80-62-6  
CMF C5 H8 O2



IC ICM G03C0001-73

INCL 430300000

CC 74-6 (Radiation Chemistry, **Photochemistry**, and  
Photographic and Other Reprographic Processes)  
Section cross-reference(s): 38

ST planog printing plate precursor polymer

IT 761445-14-1 761445-15-2 761445-16-3

761445-17-4 761445-18-5 761445-20-9

RL: NUU (Other use, unclassified); USES (Uses)

(planog. printing plate containing polymer in intermediate  
layer)

L31 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:586455 HCAPLUS

DOCUMENT NUMBER: 135:173008

TITLE: Original plate for lithographic printing plate

INVENTOR(S): Hotta, Hisashi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE         |
|---------------|------|----------|-----------------|--------------|
| -----         | ---- | -----    | -----           |              |
| JP 2001219665 | A2   | 20010814 | JP 2000-30732   | 200002<br>08 |

PRIORITY APPLN. INFO.:

JP 2000-30732

200002  
08

AB The plate consists of a support, an ink sensitization layer containing  
photo- or heat-curable resins, and a metal- or metal compound-containing  
layer in this order. The surface of the top layer may be treated  
with silicate salts or phosphonic acids for hydrophilicity, so that  
soiling in printing is prevented. The plate has high interlayer  
adhesion, resulting in good printability.

IT 251359-49-6

RL: DEV (Device component use); POF (Polymer in formulation); USES  
(Uses)

(photocurable; lithog. printing original plate having  
layer containing photo- or heat-curable resin and layer containing metal  
or metal compound)

RN 251359-49-6 HCAPLUS

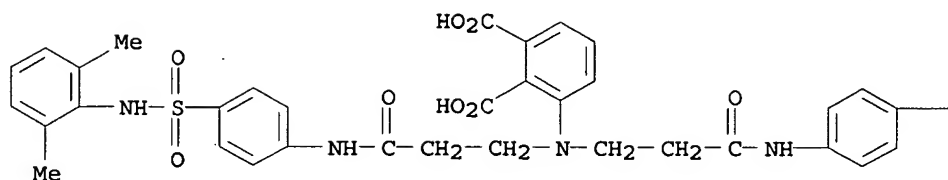
CN Glycine, N-(carboxymethyl)-N-[(heptadecafluorooctyl)sulfonyl]-,  
polymer with 3-[bis[3-[[4-[[[(2,6-dimethylphenyl)amino]sulfonyl]pheny  
l]amino]-3-oxopropyl]amino]-1,2-benzenedicarboxylic acid and  
1,10-decanediamine (9CI) (CA INDEX NAME)

CM 1

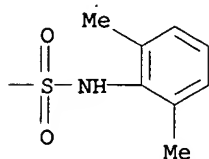
CRN 251359-48-5

CMF C42 H43 N5 O10 S2

PAGE 1-A



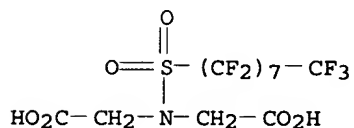
PAGE 1-B



CM 2

CRN 251359-47-4

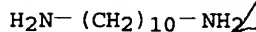
CMF C12 H6 F17 N O6 S



CM 3

CRN 646-25-3

CMF C10 H24 N2



IC ICM B41N0001-14

ICS C23C0022-48; G03F0007-00; G03F0007-11

CC 74-6 (Radiation Chemistry, **Photochemistry**, and  
Photographic and Other Reprographic Processes)

IT 251359-49-6 354117-58-1

RL: DEV (Device component use); POF (Polymer in formulation); USES  
(Uses)(photocurable; lithog. printing original plate having  
layer containing photo- or heat-curable resin and layer containing metal  
or metal compound)

L31 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:111891 HCAPLUS

DOCUMENT NUMBER: 130:189424

TITLE: Positive-working presensitized lithographic  
plate with polymer intermediate layerINVENTOR(S): Tan, Shiro; Takita, Satoru; Hotta, Hisashi; Uno,  
Seiji

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.

DOCUMENT TYPE: CODEN: JKXXAF  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: 1 Japanese  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|-------------|------|----------|-----------------|----------|
| JP 11038635 | A2   | 19990212 | JP 1997-195863  | 19970722 |

PRIORITY APPLN. INFO.:

JP 1997-195863

19970722

AB The title presensitized lithog. plate comprises a hydrophilized Al support coated with a pos.-working photosensitive layer through an intermediate layer containing a polymer having a repeating unit  $\text{CH}_2\text{CR}_1[\text{BG}(\text{EX}')\text{DX}]$ ,  $\text{CH}_2\text{CR}_1[\text{B}(\text{LX})\text{t}]$  or  $\text{CH}_2\text{CR}_1(\text{ALX}_m)$  ( $\text{R}_1 = \text{H}$ , halo, alkyl;  $\text{B}$  = aromatic group;  $\text{A} = \text{CO}_2$ ,  $\text{CONH}$ ,  $\text{CONMe}$ ;  $\text{G}$  = trivalent linking group;  $\text{D}$ ,  $\text{E}$  = single bond or divalent linking group;  $\text{X}$ ,  $\text{X}'$  = acid group with  $\text{pK}_a \leq 7$  or its alkali metal salt or ammonium salt;  $\text{t} = 2-4$ ;  $m = 2$  or  $3$ ). The lithog. plate shows low residual color and good printing durability, and whitening of the non-image area upon development is suppressed.

IT 83117-89-9P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(presensitized lithog. plate with intermediate layer containing polymer having acidic group)

RN 83117-89-9 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

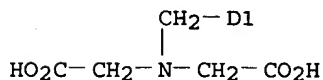
CRN 65405-48-3

CMF C13 H15 N O4

CCI IDS



D1-CH=CH<sub>2</sub>



IC .ICM G03F0007-11

ICS G03F0007-00; G03F0007-039

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 38

IT 83117-89-9P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

1276013

(presensitized lithog. plate with intermediate layer  
containing polymer having acidic group)

=>